2014 Cancer Incidence and Mortality in North Carolina

State Center for Health Statistics

February 2017

Contributing Editor

Gary Leung, Ph.D.

STATE OF NORTH CAROLINA

Roy Cooper, Governor

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Mandy Cohen, M.D., MPH, Secretary

DIVISION OF PUBLIC HEALTH

Daniel Staley, Division Director

STATE CENTER FOR HEALTH STATISTICS

Eleanor Howell, M.S., Director

CENTRAL CANCER REGISTRY

Chandrika Rao, Ph.D., Director

www.ncdhhs.gov

Table of Contents

Introduction

Cancer is a group of diseases in which there is an uncontrolled growth of abnormal cells in a part of the body. One out of every two men and one out of every three women in the United States will develop cancer during their lifetimes.[1] In 2014, cancer was the leading cause of death in North Carolina.[2] In order to determine the effect cancer has on the state's population, the North Carolina Central Cancer Registry (CCR) collects, compiles and tabulates data regarding the occurrence of cancer and reports the deaths due to cancer within the state. This report is a summary of the incidence and mortality due to cancer with the most complete and recent data the CCR has available.

Background

The CCR, located in the State Center for Health Statistics (SCHS), was established in 1986. The CCR operates under the authority granted in North Carolina General Statute 130A-208.[3] Legislation declaring cancer reporting to be mandatory in North Carolina became effective in 1947. Authorized funding for establishing a registry, however, was not appropriated until 1986. Between 1986 and 1989, only 50-60 percent of the cases were reported each year. The first year for which relatively complete statewide reporting was achieved was 1990. In 1999, new legislation was passed that requires every healthcare provider that detects, diagnoses or treats cancer cases to report all cases to the CCR.[3]

On a national level, the CCR reports data to the North American Association of Central Cancer Registries (NAACCR)[4] and the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR)[5]. Both organizations annually review the data the CCR submits, for completeness, quality and timeliness. Completeness is the percentage of cases reported. Having high quality data ensures that there are not duplicate records per case and that certain data variables are accurate and complete. In order to meet the timeliness requirement, the data must be submitted within 23 months of the completion of the diagnosis year under review. For the last eight years, the CCR has achieved the NAACCR Gold Standard for Registry Certification. This certification is the highest NAACCR standard awarded for completeness, quality and timeliness of data. The CCR continues to meet the requirements for NPCR in order to receive funding and to have data publicized nationally.

Purpose

As a population-based registry, the CCR collects, analyzes and disseminates information on the occurrence of cancer in North Carolina. The data collected include patient demographics (e.g., race, gender and age) and medical information on each cancer diagnosis (e.g., primary site, morphology, stage and first course of treatment). This information is used to improve cancer treatment and identify groups that have higher incidence and mortality from cancer.[6] The CCR preserves the confidentiality of information obtained for medical, educational, research and statistical purposes. No identifying information regarding patients, hospitals or physicians is released except under the conditions specified in General Statute and North Carolina Administrative Code.[3]

2014 Cancer Incidence and Mortality in North Carolina is the 21st annual report of the CCR. The contents of this report represent a summary of the information collected on cancer diagnoses and deaths in 2014. The information includes incidence and mortality counts and rates for all

cancers by county, race, gender and age. The primary goal of this report is to provide cancer data to healthcare planners, researchers and the general public.

Data Sources and Collection

Healthcare providers who detect, diagnose and treat cancer report cases to the CCR. The CCR receives data on death due to cancer from the Vital Records (VR) Branch, also located in the SCHS. The data are coded according to standard procedures and guidelines.

Cancer Incidence

Cancer incidence is the number of newly diagnosed cancer cases, not including recurrences, during a particular time period within a certain population. With each cancer diagnosis or treatment, the healthcare providers report the case to the CCR within six months. The CCR releases data approximately two years after the end of the diagnosis year, due to reporting delay, consolidation of records and cleaning of files.

From each case, the CCR collects patient demographics and medical information on the cancer diagnosis. Some demographics the CCR receives regarding an individual diagnosed with cancer include race, ethnicity, gender, age and residence. In addition, the CCR gathers data such as the first location of the cancer (primary site), the form of cancer (morphology), tumor size and the spread of the cancer (stage). Data regarding first course of treatment and vital status are also collected.

The CCR receives the majority of the cancer incidence data from healthcare facilities (hospitals, cancer centers, dermatology centers, urology centers and surgical oncology centers). Incidence data also come from physician offices, pathology reports, interstate data exchange, nursing facilities and death clearance cases. At present, there are 119 hospitals which routinely diagnose and treat cancer patients. Of these, 82 have tumor registries where the data are abstracted and submitted to the CCR. Also, there are 162 physician offices and clinics, as well as 67 pathology laboratories in North Carolina reporting to the CCR. Death Clearance is a process of linking the death certificates with the cancer incidence data to identify cancer cases that may have been missed through regular reporting. For 2014 diagnosis year, the CCR received 77,650 reports from over 230 facilities.

Cancer Mortality

Cancer mortality is the number of deaths due to cancer during a specified time period within a certain population. Death certificates are filed to a county health director within five days. The death certificate is then passed on to VR on the fifth day of the following month.[3]

Once a year, VR provides the CCR with data on the deceased whose primary cause of death is cancer. This information includes demographics on the deceased including race, ethnicity, gender, age and residence. In addition to demographics, a primary cause of death and date of death are also collected.

Differences in Collecting Incidence and Mortality

For many studies, the CCR examines both incidence and mortality. Therefore, it is important to note differences in obtaining incidence data and mortality data. These differences include, but are not limited to, timeliness in reporting (both in state and out-of-state cases) and case finding.

There is a difference in the timeliness of reporting incidence and mortality data of cases reported in the state for North Carolina residents. For incidence data, the healthcare facility is supposed to report the case to the CCR within six months. However, with mortality data, a report of each death is submitted to the VR within two months.

Some people living near neighboring states go outside North Carolina for health care. Also, people may get diagnosed with or die of cancer outside of the state. North Carolina has an exchange agreement for cancer incidence data with 37 states and Washington, D.C., including its border states of Virginia, Tennessee and South Carolina. In addition, North Carolina has an exchange agreement with the other 49 states, as well as with Washington, D.C., and United States territories, for exchanging death certificates. Typically, incidence data are exchanged twice a year while mortality data, monitored by the National Center for Health Statistics (NCHS), are exchanged between states within two months of a death. However, even with these exchange agreements in place, delays or omissions can occur in the interchange of incidence and mortality records.

Although new cancer cases are required by law to be reported to the CCR, there are many that are not. Cases diagnosed in small hospitals that do not have a cancer registry may be under reported. Physicians associated with a large hospital will often report cases via a hospital registrar, but those not affiliated with a hospital may not have ample staff to report cases to the CCR. In the last few years, more cases are being diagnosed and treated in physician offices or surgical oncology centers and may never be referred to an oncologist nor be reported. The CCR has improved the completeness of reporting by recruiting physician offices and pathology laboratories as well as sending staff to smaller facilities to collect the required data. Despite the efforts of the CCR, incidence data are considered to be incomplete. On the other hand, death data are regarded as complete. Therefore, there may appear to be an excess of deaths compared to the number of cases for some cancers in rural counties.

Cancer Classification

The CCR receives an abstract of each medical record from a reporting facility. Each abstract contains specific medical information about the cancer. The cancers are categorized using codes according to the *International Classification of Diseases for Oncology, Third Edition.*[7] Each code is comprised of two pieces: topography and morphology. The topography code tells where the tumor began (primary site). The morphology code tells the type of cell (histology), the way it behaves within the body (behavior) and supplementary information about the tumor (grade). Care must be taken when coding lymphomas and leukemia.

The medical record also contains data regarding the cancer stage. The stage at diagnosis indicates how far the cancer has spread when it is first diagnosed. Knowing the extent of the cancer is important in treatment and prognosis. The CCR commonly uses National Cancer Institute's Surveillance, Epidemiology, and End Results Program[8] definitions for staging and groups cancers as in situ, local, regional, distant and unknown.

In the data collected by the CCR, only malignant tumors are included with one exception. Data on benign brain and central nervous system tumors are also reported to the CCR. Only malignant tumors are included in this report. In situ cases are generally reportable to the CCR. However, these tumors, with the exception of in situ breast and bladder cases, are not used in cancer

surveillance or in cancer incidence statistics. Data on basal and squamous cell skin cancers are not collected by the CCR unless they have spread to tissue beyond the original site. Malignant melanoma may occur at many different body sites; however, this report focuses on melanoma of the skin.

Statistical Methods

Populations not only vary in size, but also in their racial, gender and age breakups. Thus, the counts of cancer incidence and mortality have limitations when comparisons are needed.

Rates are used to show the risk of an event occurring in a population and the CCR presents rates per 100,000 persons. The CCR calculates rates for both incidence and mortality data. A crude rate is found by dividing the number of events (e.g., cancer cases or deaths) for a population of interest in a specified time period by the population of interest at risk during the same time period. This ratio is then multiplied by 100,000 to express it as a rate per 100,000 persons. A crude rate can be expressed as

$$crude\,rate = \frac{count\ of\ events\ for\ a\ population\ of\ interest}{population\ \ of\ interest\ at\ risk} \times 100{,}000.$$

Crude incidence and mortality rates for 2014 used the population estimates obtained from the NCHS. Incidence reports published by the CCR prior to 2006 were calculated using the State Demographer's population estimates. Hence, rates from reports prior to 2006 are not comparable to rates in this report.

Age-Specific Rates

An age-specific rate is an example of a crude rate where the population of interest is a specific age group. For age group *i*, an age-specific rate can be calculated as

$$age\text{-}specific\ rate_i = \frac{count\ of\ \ events\ \ for\ age\ group_i}{population\ \ of\ age\ group_i\ at\ risk} \times 100{,}000.$$

A typical way to divide age groups is in five year increments (0-4, 5-9, …, 80-84, 85+). In this report, the ages are grouped as 0 to 19 (pediatrics), 20 to 44 (young adults), 45 to 64 (middle-aged adults) and 65 and older (senior adults).

Age-specific rates are used to examine the burden cancer has on a particular age group and to determine the need for services for a given population. In addition, they can be used to compare different population groups of the same age and notice the effect that cancer has on the various populations. Within a population, age-specific rates can be used to examine how cancer burden differs among age groups.

Age-Adjusted Rates

The occurrence of an event may vary with age, and the age structure of a population can vary as well. Therefore, age-specific rates are not always useful for comparisons and as a result must be adjusted to account for these differences. An age-adjusted rate is a weighted average of the age-specific rates expressed as a rate per 100,000 persons. Age-adjusted rates should be used only if the same standard population is used for computing weights. The standard population provides the proportion of the population in specific age groups and includes information regarding age,

but not race, sex or geographic location. The standard population the CCR uses is the 2000 United States Census population.

To calculate age-adjusted rates, multiply each age-specific rate by the proportion of individuals in that age group in the standard population. For example, for age group *i*,

$$weighted\ rate_i = age\text{-}specific\ rate_i \times \frac{standard\ population\ in\ age\ group_i}{total\ standard\ population}.$$

The age-adjusted rate is the sum of all the weighted age-specific rates. For *n* age groups the age adjusted rate is

$$age\text{-}adjusted\ rate = weighted\ rate_1 + weighted\ rate_2 + \cdots + weighted\ rate_n.$$

An age-adjusted rate allows comparison between populations of different age groups, time periods and/or geographic areas. Age-adjusting ensures that discrepancies in rates of various populations are not a result of differences in age distributions.

Gender-Specific Rates

In addition to computing rates by age, rates can be computed by gender. For both incidence and mortality, gender data are collected by the CCR and VR, respectively. Gender-specific rates are used for comparison between different population groups of the same gender and to examine how cancer tendencies differ between males and females. Gender-specific rates are also used when calculating rates that only affect males (e.g., prostate and testes) or females (e.g., ovary and cervix).

Race-Specific Rates

Rates can also be calculated by race. Race-specific rates are used for comparison between different population groups of the race and to examine how the cancer burden varies between racial groups.

Both race and Hispanic ethnicity are collected by the CCR. Race information can be classified as one of the following: white, black, Asian/Pacific Islander, American Indian and other. Although the CCR has five race fields to account for people who are multi-racial, only the primary race is used. Often the CCR reports rates for whites and minorities. Minorities are defined to be blacks, Asian/Pacific Islanders, American Indians and others. To assist in identifying Hispanic ethnicity, the CCR uses the NAACCR Hispanic Identification Algorithm (NHIA). This algorithm uses name, birthplace, gender and race to determine Hispanic ethnicity.[9] Thus, the CCR can report rates on white non-Hispanics, black non-Hispanics, other races non-Hispanics and Hispanics.

Reliability of Rates

Precautions should always be taken when comparing rates. Rates are not a measure of actual risk. They are used to compare cancer burden between time periods, age groups, gender groups and racial groups. Both the size of the numbers and the characteristics of the population are important indicators of the real value of the rate. Rates based on a small number of cases or for sparsely populated geographic areas should be viewed with caution. Small fluctuations can lead to drastic changes. Therefore, sometimes it is more appropriate to look at the number of cases instead of the rates. When the number of events is small, multiple-year summary rates will provide a much better measurement of risk. Expanding the period of time studied enlarges the absolute numbers and adds more credence to a statement regarding a rate.[10]

Limitations of Data

When comparing rates between two populations, the user should note that age structure is the only difference between the populations for which rates have been adjusted. Since county demographics can vary considerably, one needs to be careful not to misinterpret rates. Racial composition, for example, can have a marked influence on the patterns of cancer incidence and mortality. Under-reporting, due to out-of-state cases or poor case-finding in some non-hospital situations, also needs to be taken into account when making comparisons of cancer data.

Summary of 2014 Cancer Data

The CCR collected approximately 53,576 cases of newly diagnosed cancers and 19,301 deaths due to cancer in 2014 (Table 1). Female breast, prostate, lung and bronchus, and colon and rectum cancers were the leading diagnosed cancers among all gender and races combined. The CCR often refers to these as the top four cancers (Table 2).

Cancer risk is strongly associated with lifestyle and behavior. Dietary patterns, alcohol use, and sexual and reproductive behaviors, which vary by demographic groups, are risk factors of cancer. Cancer is diagnosed more often among older North Carolinians than younger ones. In general, males have a higher burden of cancer compared with females. Overall, non-Hispanic blacks and non-Hispanic whites had the highest incidence and mortality rates when compared with non-Hispanic other races and Hispanics. Lung and bronchus cancer was the most common cause of death due to cancer.

Age

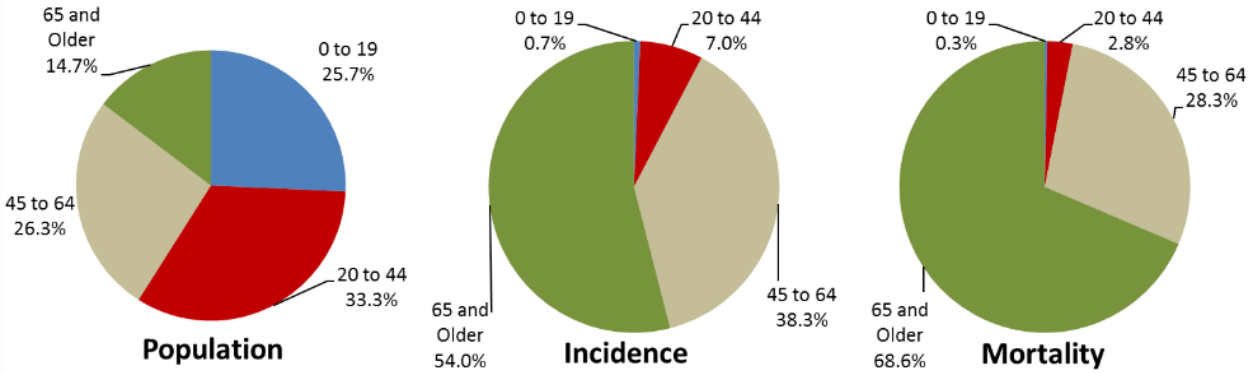
More adults are directly affected by cancer than children. Senior adults (ages 65 and older) made up about 15 percent of the population in 2014,[11] but accounted for over 50 percent of newly diagnosed cancer cases and two-thirds of deaths due to cancer. Children (ages 0 to 19) were the third largest age group, but made up less than 1 percent of both newly diagnosed cancers and deaths due to cancer (Chart 1). In 2014, the median age at which cancer was diagnosed was 66, but people ranged in age from 2 to 106. People who died of cancer ranged in age from 1 to 106 with the median age being 71. The median age of incidence and mortality for each age group as well as the percentage of cases and deaths the top four cancers comprise are shown below. In both middle-aged and senior adults, the top four cancers combined accounted for about half of the cancer cases and cancer deaths (Chart 2).

Children had a very different pattern of cancer than adults. Leukemia, Hodgkin Disease, Non-Hodgkin Lymphoma, brain and endocrine cancers accounted for over 48 percent of cancers diagnosed in people under age 20. Leukemia, bone, brain and endocrine cancers made up over 78 percent of pediatric cancer deaths (Tables 5 and 6).

Young adults (ages 20 to 44) had a different pattern of cancer than children. In this age group, there was a greater incidence of female breast, lung/bronchus and colorectal cancers than in the pediatric age group. On the other hand, the proportion of bone and brain cancers was lower. Female breast cancer accounted for over 16 percent of all cancer deaths and had the highest mortality rate within this age group. The mortality rate for female breast cancer was more than doubled the next highest cancer rate, colon and rectum (Tables 5 and 6).

Cancer patterns were different in middle-aged adults (ages 45 to 64) compared with young adults. In this age group, there was a higher frequency of prostate cancer. The percentage of testicular cancer and Hodgkin disease was lower. The frequency of lung and bronchus cancer deaths was higher for middle-aged adults than young adults (Tables 5 and 6).

Chart 1: 2014 Percentages of N.C. Population, Cancer Incidence and Mortality by Age



In senior adults, cancer patterns were similar to middle-aged adults. The incidence of Hodgkin disease continued to be lower. Lung and bronchus cancer accounted for more deaths than colon and rectum, female breast and prostate cancers combined (Tables 5 and 6).

Chart 2: 2014 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Age Group

	Incidence		Mortality	
	Median Age	**Top 4 Sites**	**Median Age**	**Top 4 Sites**
Children (ages 0-19)	12	2.4%	11	0.0%
Young Adults (ages 20 to 44)	39	35.7%	39	39.0%
Middle-Aged Adults (ages 45 to 64)	57	54.9%	58	48.1%
Senior Adults (ages 65 and older)	73	53.0%	76	49.7%

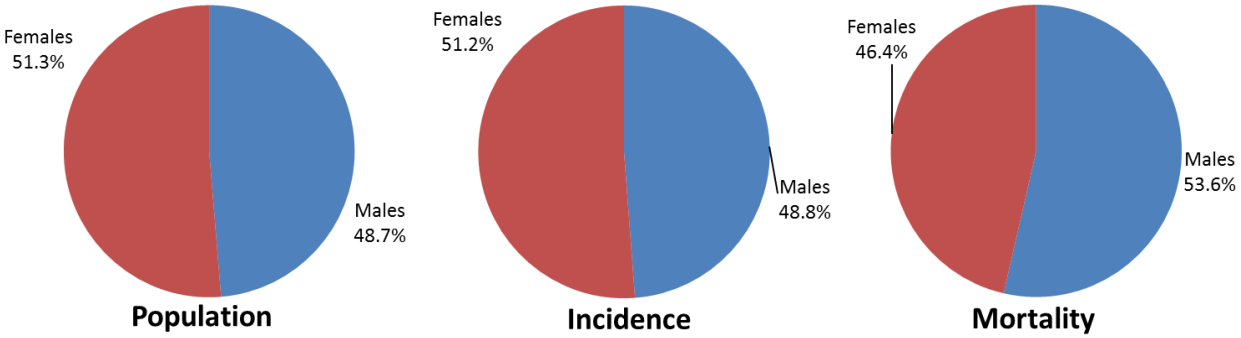
Gender

In 2014, more than 50 percent of the state population was female. While more than half of all cancer cases were diagnosed in females, more than half of deaths due to cancer were in males (Chart 3). The median age of diagnosis for females was slightly younger than males, but the median age of mortality for females was older than males. The top four sites comprised about half of both cancer incidence and mortality (Chart 4).

The most frequently occurring cancers among males were prostate, lung and bronchus, colon and rectum, bladder and melanoma. Lung and bronchus, prostate, colon and rectum, pancreatic and liver cancers were the leading causes of death due to cancer (Table 8).

Among females, the most frequently occurring cancers were breast, lung and bronchus, colon and rectum, uterine and endocrine. Lung and bronchus, breast, colon and rectum, pancreatic and ovarian were the leading causes of death due to cancer (Table 8).

Chart 3: 2014 Percentages of N.C. Population, Cancer Incidence and Mortality by Gender



Differences between genders could provide clues to factors involved in the development of cancer. Esophageal, laryngeal, bladder, liver and oral cavity cancers had a higher frequency among males compared with females. However, females had a higher frequency of endocrine cancer compared with males. In males, about one third of deaths due to cancer came from lung and bronchus cancer, whereas in females, lung and bronchus cancer constituted about one quarter of cancer deaths (Table 7).

Chart 4: 2014 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Gender

	Incidence		Mortality	
	Median Age	**Top 4 Sites**	**Median Age**	**Top 4 Sites**
Males	66	48.2%	70	47.8%
Females	65	56.0%	72	49.8%

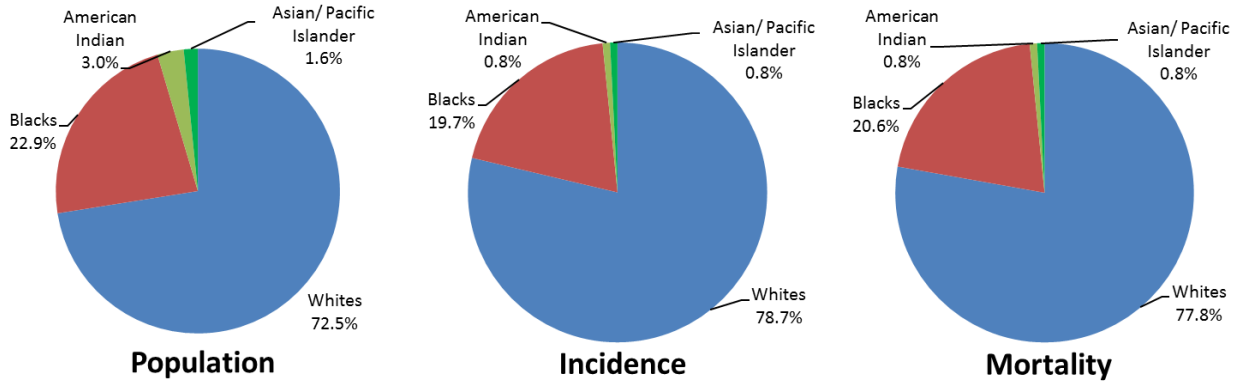
Race and Ethnicity

In 2014, about 73 percent of the North Carolina population was white. Blacks comprised more than one-fifth of the population. About 79 percent of cancer cases and more than 78 percent of cancer deaths occurred in whites while about 20 percent occurred in blacks (Chart 5). The median age and the percentage the top four cancer sites comprise among all cancers for both incidence and mortality are displayed for all racial ethnic groups (Chart 6). Hispanics had the youngest median age of incidence as well as mortality. About 59 percent of cancer diagnosed in non-Hispanic blacks were from the top four sites.

For non-Hispanic whites, besides the top four cancers, melanoma was the next most frequently diagnosed cancer. Pancreatic cancer was the fifth leading cause of death in this group. The number of lung and bronchus cancer deaths was about 1.6 times as large as the number of deaths due to female breast, colon and rectum, and prostate cancers combined (Table 14).

Among non-Hispanic blacks, prostate cancer comprised approximately 16 percent of all diagnosed cancers. Uterine cancer was also among the top five frequently diagnosed cancers for this group. Pancreatic cancer was the next leading cause of death after the top four cancers. The number of lung and bronchus cancer deaths was almost similar to the number of deaths due to female breast and colon and rectum, and prostate cancers combined (Table 14).

Chart 5: 2014 Percentages of N.C. Population, Cancer Incidence and Mortality by Race



For non-Hispanic other races, besides the top four cancers, melanoma was another commonly diagnosed cancer. The combined number of cancer deaths due to pancreatic and liver cancers were higher than those due to colorectal cancer in this group (Table 14).

For Hispanics, outside of the top four cancers, uterine cancer was the most frequently diagnosed. Lung and bronchus cancer constituted 16 percent of cancer deaths. For other racial and ethnic groups, lung and bronchus cancers made up about 27 percent of cancer deaths. In Hispanics, pancreatic cancer was the fifth leading cause of death due to cancer (Table 14).

Chart 6: 2014 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Race and Ethnicity

	Incidence		Mortality	
	Median Age	**Top 4 Sites**	**Median Age**	**Top 4 Sites**
Non-Hispanic Whites	67	50.8%	72	49.0%
Non-Hispanic Blacks	63	58.9%	67	49.4%
Non-Hispanic Other Races	63	53.3%	67	45.9%
Hispanics	56	41.3%	62.5	30.4%

Conclusion

This descriptive report is intended to serve as a reference on cancer incidence and mortality for healthcare planners, researchers and the general public. This publication should not be regarded as a definitive description of the cancer incidence in North Carolina. Although there are important limitations in the use of these data, the observed number of cases and the calculated rates within a county, a gender group, a racial and ethnic group, or an age group have many uses. These uses include planning and evaluating health services at the county and state level and identifying cancer disparities between specific groups. The data provided by the CCR can be used by the Comprehensive Cancer Program in the Division of Public Health and other research organizations for prevention, detection and treatment of cancer.

The editor would like to thank Ann Farmer, Christian Klaus, Eleanor Howell, Chandrika Rao and the other members of the CCR staff for their contributions to this report.

Available Cancer Information

North Carolina Central Cancer Registry
www.schs.state.nc.us/units/ccr/ 919-715-4574

North Carolina State Center for Health Statistics
www.schs.state.nc.us 919-733-4728

North Carolina Breast and Cervical Cancer Control Program
http://bcccp.ncdhhs.gov 919-707-5300

North Carolina CCR Rapid Case Ascertainment
http://unclineberger.org/rapid-case-ascertainment 919-966-0032

American Cancer Society
www.cancer.org 1-800-ACS-2345

National Cancer Institute
www.cancer.gov 1-800-4-CANCER

Surveillance Epidemiology, and End Results
http://seer.cancer.gov

Cancer Control P.L.A.N.E.T.
http://cancercontrolplanet.cancer.gov

NCI State Cancer Profiles
http://statecancerprofiles.cancer.gov

National Program of Cancer Registries
www.cdc.gov/cancer/NPCR

North American Association of Central Cancer Registries
www.naaccr.org

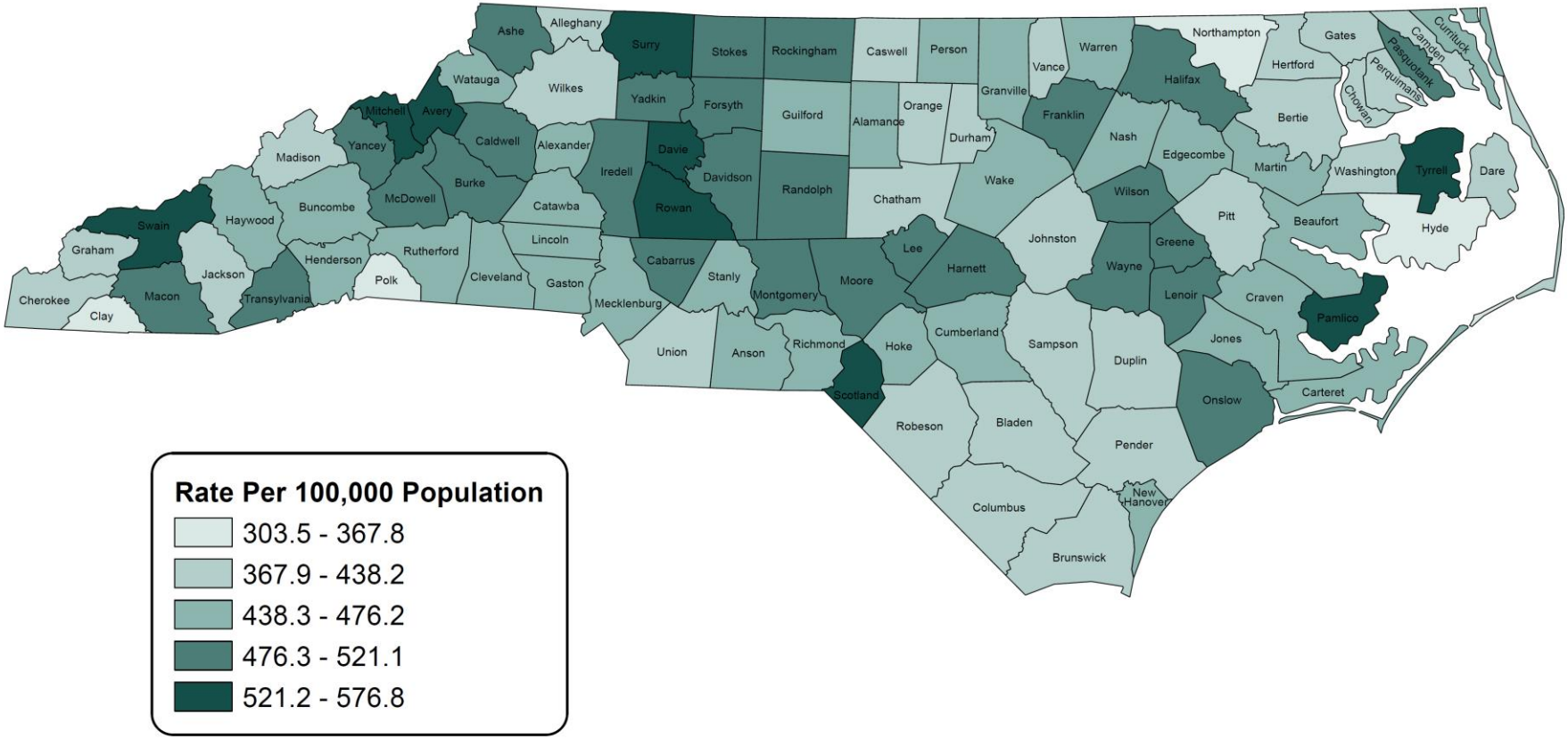
Centers for Disease Control and Prevention
www.cdc.gov

CDC Wonder United States Cancer Statistics
http://wonder.cdc.gov/cancer.html

Association of North Carolina Cancer Registrars
www.ncregistrars.com

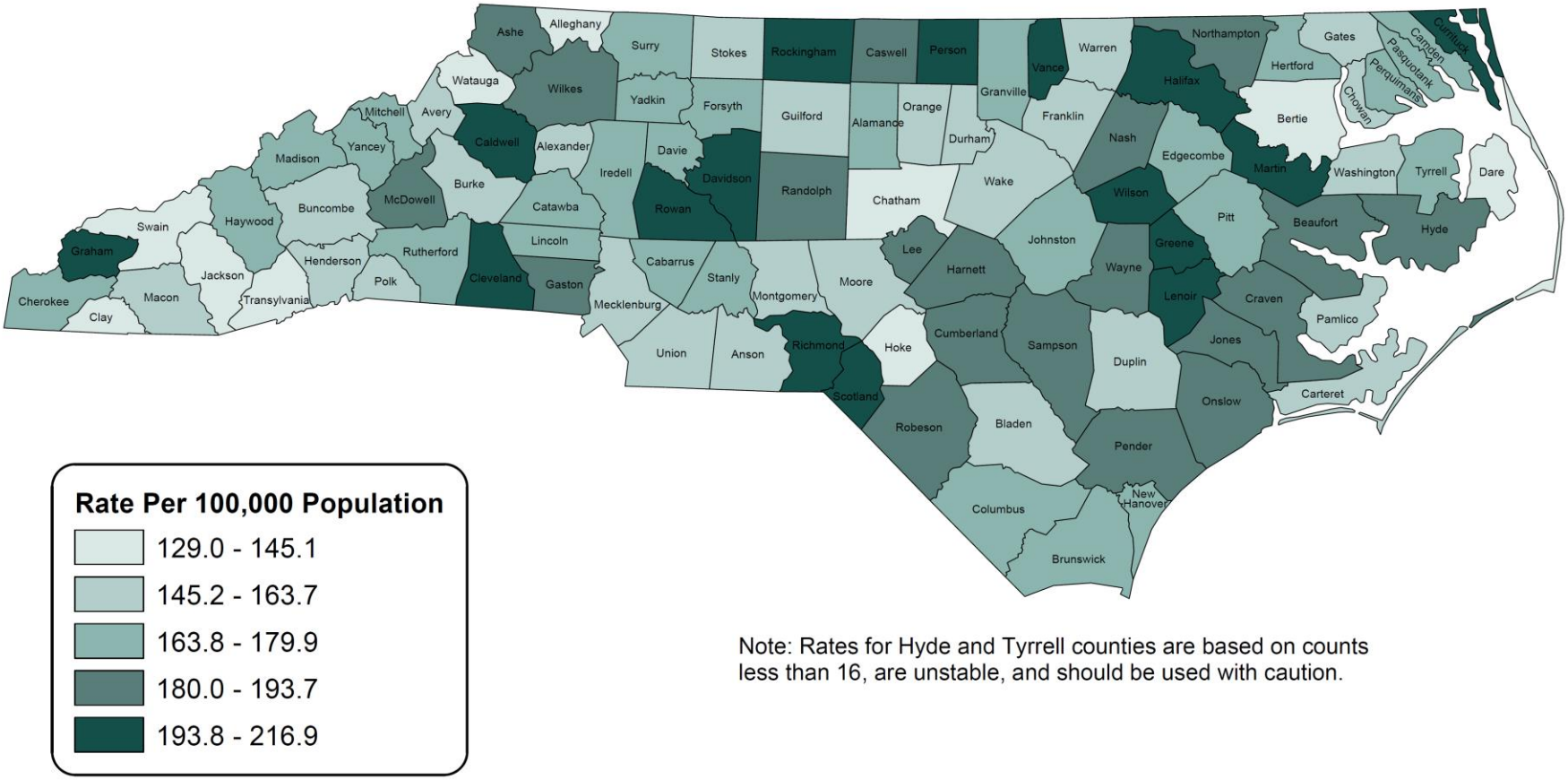
National Cancer Registrars Association
www.ncra-usa.org

Map 1: 2014 North Carolina Cancer Incidence Rates by County



Note: Rates are based on cases reported to the North Carolina Central Cancer Registry and are subject to change as files are updated.

Map 2: 2014 North Carolina Cancer Mortality Rates by County



Rate Per 100,000 Population

- 129.0 - 145.1
- 145.2 - 163.7
- 163.8 - 179.9
- 180.0 - 193.7
- 193.8 - 216.9

Note: Rates for Hyde and Tyrrell counties are based on counts less than 16, are unstable, and should be used with caution.

Note: Rates are based on cases reported to the North Carolina Central Cancer Registry and are subject to change as files are updated.

Table 1: 2014 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
All Cancers	53,576	465.0	19,301	169.3
Oral Cavity and Pharynx	1,421	12.1	345	2.9
Lip	47	0.4	2	0.0
Tongue	450	3.8	99	0.8
Salivary Glands	131	1.2	37	0.3
Floor of Mouth	70	0.6	2	0.0
Nasopharynx	45	0.4	16	0.1
Oropharynx	86	0.7	49	0.4
Hypopharynx	80	0.6	13	0.1
Other Mouth and Pharynx	512	4.3	127	1.1
Digestive System	8,768	75.9	4,651	40.4
Esophagus	531	4.4	426	3.6
Stomach	690	6.0	305	2.7
Small Intestine	338	2.9	55	0.5
Colon and Rectum	4,104	36.0	1,594	14.1
Anus and Anal Canal	228	2.0	31	0.3
Liver and Intrahepatic Bile Duct	956	7.9	767	6.5
Gallbladder	123	1.1	78	0.7
Pancreas	1,464	12.6	1,255	10.9
Other Digestive Organs	334	2.9	140	1.2
Respiratory System	8,511	72.6	5,778	49.9
Larynx	477	3.9	139	1.2
Lung and Bronchus	7,879	67.3	5,599	48.4
Other Respiratory Organs	155	1.4	40	0.3
Bones and Joints	100	1.0	52	0.5
Soft Tissue including Heart	348	3.2	144	1.3
Malignant Melanoma of the Skin	2,717	24.3	306	2.8
Breast	9,871	86.7	1,331	11.8
Invasive Breast	8,025	70.6		
In Situ Breast	1,846	16.1		
Female Genital System	2,930	47.6	920	14.4
Cervix Uteri, Invasive	393	7.5	127	2.2
Uterus (Corpus, NOS)	1,628	25.5	313	4.8
Ovary	597	9.7	404	6.3
Other Female Genital Organs	312	5.0	76	1.1

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include in situ cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 1 (continued): 2014 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Male Genital System	6,454	114.6	923	21.0
Prostate	6,197	109.2	900	20.5
Testis	206	4.4	12	0.3
Penis	39	0.8	9	0.2
Other Male Genital Organs	12	0.2	2	0.0
Urinary System	4,210	36.9	981	8.7
Urinary Bladder	2,250	19.8	500	4.5
Kidney and Renal Pelvis	1,856	16.1	449	3.9
Ureter	75	0.7	18	0.2
Other Urinary Organs	29	0.2	14	0.1
Eye and Orbit	72	0.6	16	0.1
Brain and Other CNS	626	5.8	483	4.3
Endocrine System	1,323	12.5	102	0.9
Thyroid Gland	1,262	12.0	62	0.5
Other Endocrine and Thymus	61	0.6	40	0.4
Lymphomas	2,050	18.4	645	5.8
Hodgkin Disease	250	2.4	41	0.4
Non-Hodgkin Lymphoma	1,800	15.9	604	5.4
Multiple Myeloma	864	7.5	462	4.1
Leukemia	1,333	11.9	702	6.4
Acute Lymphocytic Leukemia	28	0.3	38	0.4
Chronic Lymphocytic Leukemia	503	4.3	156	1.4
Acute Myeloid Leukemia	455	4.1	300	2.7
Chronic Myeloid Leukemia	202	1.9	40	0.4
Other Leukemia	145	1.3	168	1.6
Other Cancers - Uncategorized	5,143	46.4	1,460	12.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 2: 2014 North Carolina Top Ten Cancer Incidence and Mortality Sites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	9,787	160.2	Lung and Bronchus	5,599	48.4
Prostate	6,197	109.2	Female Breast	1,308	20.8
Lung and Bronchus	7,879	67.3	Prostate	900	20.5
Colon and Rectum	4,104	36.0	Colon and Rectum	1,604	14.2
Corpus Uteri	1,628	25.5	Pancreas	1,255	10.9
Melanoma (Skin)	2,717	24.3	Liver	767	6.5
Urinary Bladder	2,250	19.8	Leukemia	702	6.4
Kidney	1,856	16.1	Ovary	404	6.3
Non-Hodgkin Lymphoma	1,809	16.0	Non-Hodgkin Lymphoma	604	5.4
Pancreas	1,464	12.6	Corpus Uteri	313	4.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 3: 2014 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
North Carolina	53,576	465.0	19,301	169.3
Alamance	879	458.8	339	169.8
Alexander	231	454.8	80	156.1
Alleghany	74	401.9	28	143.0
Anson	150	455.2	55	159.6
Ashe	205	489.0	81	184.9
Avery	137	531.0	39	152.5
Beaufort	319	440.8	141	191.5
Bertie	117	394.1	41	138.1
Bladen	202	413.4	81	159.3
Brunswick	824	409.7	350	172.7
Buncombe	1,536	460.8	551	160.5
Burke	616	511.6	203	163.7
Cabarrus	981	487.7	318	167.2
Caldwell	559	508.6	218	206.7
Camden	52	411.5	20	167.6
Carteret	458	446.8	182	162.6
Caswell	146	424.2	60	191.6
Catawba	913	472.4	342	176.7
Chatham	459	429.3	146	129.0
Cherokee	207	438.2	85	168.0
Chowan	94	419.5	38	156.1
Clay	57	317.1	28	135.4
Cleveland	575	462.2	263	211.6
Columbus	310	422.5	125	164.6
Craven	599	466.1	242	182.4
Cumberland	1,358	448.0	540	186.1
Currituck	143	464.8	58	206.9
Dare	219	422.5	74	144.8
Davidson	1,005	484.1	417	198.5
Davie	330	564.0	102	167.7
Duplin	291	395.3	118	156.7
Durham	1,235	427.8	423	156.0
Edgecombe	323	448.3	127	179.1
Forsyth	2,115	508.0	723	175.5

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 3 (continued): 2014 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Franklin	370	478.3	116	152.2
Gaston	1,178	471.2	472	190.9
Gates	63	423.2	25	153.1
Graham	59	436.3	29	201.7
Granville	341	471.0	112	164.6
Greene	123	479.2	54	214.0
Guilford	2,653	460.7	914	161.8
Halifax	341	483.5	155	202.7
Harnett	575	480.5	220	188.7
Haywood	436	460.7	172	167.6
Henderson	830	457.5	306	159.8
Hertford	132	431.6	54	170.1
Hoke	186	441.8	52	134.8
Hyde	27	327.7	15	190.5
Iredell	938	482.1	312	166.4
Jackson	217	394.7	69	129.5
Johnston	831	436.9	305	172.8
Jones	73	467.1	28	185.8
Lee	345	497.1	126	183.0
Lenoir	402	516.2	169	216.9
Lincoln	468	456.1	157	165.2
McDowell	314	505.6	120	193.7
Macon	301	491.2	104	161.8
Madison	124	401.3	50	168.3
Martin	161	461.3	70	202.5
Mecklenburg	4,261	457.4	1,331	154.8
Mitchell	127	551.7	44	170.5
Montgomery	187	507.0	62	157.6
Moore	692	488.7	244	155.9
Nash	557	468.5	229	191.0
New Hanover	1,179	461.7	427	164.6
Northampton	124	367.8	66	186.8
Onslow	682	510.7	239	188.6
Orange	591	430.3	201	158.6
Pamlico	124	570.6	33	158.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 3 (continued): 2014 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Pasquotank	231	479.6	86	177.9
Pender	300	413.3	133	190.9
Perquimans	92	424.0	40	167.9
Person	232	455.6	105	199.9
Pitt	714	433.4	271	167.3
Polk	116	303.5	57	153.2
Randolph	928	521.1	322	182.4
Richmond	263	474.1	110	197.5
Robeson	555	383.0	264	189.4
Rockingham	622	486.0	263	200.8
Rowan	928	534.0	359	204.4
Rutherford	450	470.2	161	170.9
Sampson	341	437.3	152	187.5
Scotland	254	576.8	90	200.5
Stanly	381	476.2	143	178.1
Stokes	327	493.8	99	150.8
Surry	545	537.2	187	178.5
Swain	103	560.6	28	145.1
Transylvania	275	487.9	84	136.6
Tyrrell	31	550.2	11	174.7
Union	927	428.1	297	148.5
Vance	244	438.0	113	197.7
Wake	4,344	472.2	1,249	149.5
Warren	139	443.1	50	155.9
Washington	77	389.1	28	161.2
Watauga	261	474.6	77	135.1
Wayne	694	486.4	272	191.2
Wilkes	423	431.2	186	186.6
Wilson	483	480.1	203	196.9
Yadkin	255	494.5	89	169.0
Yancey	144	512.2	52	169.6

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 4: 2014 Ten Highest and Lowest Cancer Incidence and Mortality Rates by County

Incidence - Lowest Ten

	Cases	Rate
Polk	116	303.5
Clay	57	317.1
Hyde	27	327.7
Northampton	124	367.8
Robeson	555	383.0
Washington	77	389.1
Bertie	117	394.1
Jackson	217	394.7
Duplin	291	395.3
Madison	124	401.3

Mortality - Lowest Ten

	Deaths	Rate
Chatham	146	129.0
Jackson	69	129.5
Hoke	52	134.8
Watauga	77	135.1
Clay	28	135.4
Transylvania	84	136.6
Bertie	41	138.1
Alleghany	28	143.0
Dare	74	144.8
Swain	28	145.1

Incidence - Highest Ten

	Cases	Rate
Scotland	254	576.8
Pamlico	124	570.6
Davie	330	564.0
Swain	103	560.6
Mitchell	127	551.7
Tyrrell	31	550.2
Surry	545	537.2
Rowan	928	534.0
Avery	137	531.0
Randolph	928	521.1

Mortality - Highest Ten

	Deaths	Rate
Lenoir	169	216.9
Greene	54	214.0
Cleveland	263	211.6
Currituck	58	206.9
Caldwell	218	206.7
Rowan	359	204.4
Halifax	155	202.7
Martin	70	202.5
Graham	29	201.7
Rockingham	263	200.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 5: 2014 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	0-19		20-44		0-19		20-44	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	373	14.6	3,741	112.9	61	2.4	534	16.1
Oral Cavity	*	*	73	2.2	0	0.0	10	0.3
Esophagus	0	0.0	12	0.4	0	0.0	11	0.3
Stomach	0	0.0	43	1.3	0	0.0	14	0.4
Colon and Rectum	7	0.3	249	7.5	0	0.0	69	2.1
Liver	*	*	25	0.8	1	0.0	21	0.6
Gallbladder	0	0.0	*	*	0	0.0	3	0.1
Pancreas	*	*	41	1.2	0	0.0	11	0.3
Larynx	0	0.0	14	0.4	0	0.0	0	0.0
Lung and Bronchus	*	*	105	3.2	0	0.0	51	1.5
Bone	24	0.9	24	0.7	11	0.4	9	0.3
Soft Tissue	17	0.7	52	1.6	5	0.2	22	0.7
Melanoma (Skin)	14	0.5	329	9.9	2	0.1	15	0.5
Female Breast	*	*	943	56.7	0	0.0	87	5.2
Cervix Uteri	0	0.0	149	9.0	0	0.0	22	1.3
Corpus Uteri	0	0.0	117	7.0	0	0.0	3	0.2
Ovary	*	*	52	3.1	0	0.0	9	0.5
Prostate	0	0.0	37	2.2	0	0.0	1	0.1
Testes	11	0.8	151	9.2	1	0.1	4	0.2
Urinary Bladder	*	*	39	1.2	0	0.0	5	0.2
Kidney	7	0.3	149	4.5	2	0.1	11	0.3
Endocrine	31	1.2	392	11.8	8	0.3	6	0.2
Multiple Myeloma	0	0.0	25	0.8	0	0.0	5	0.2
Leukemia	34	1.3	116	3.5	16	0.6	33	1.0
Brain and Other CNS	69	2.7	111	3.4	13	0.5	41	1.2
Hodgkin Disease	23	0.9	111	3.4	0	0.0	7	0.2
Non-Hodgkin Lymphoma	24	0.9	148	4.5	0	0.0	25	0.8
Other Cancers	98	3.8	231	7.0	2	0.1	39	1.2

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 5 (continued): 2014 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	45-64		65 and above		45-64		65 and above	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	20,549	787.7	28,913	1976.5	5,465	209.5	13,241	905.2
Oral Cavity	713	27.3	632	43.2	125	4.8	210	14.4
Esophagus	229	8.8	290	19.8	164	6.3	251	17.2
Stomach	253	9.7	394	26.9	105	4.0	186	12.7
Colon and Rectum	1,579	60.5	2,269	155.1	475	18.2	1,060	72.5
Liver	466	17.9	464	31.7	340	13.0	405	27.7
Gallbladder	42	1.6	78	5.3	27	1.0	48	3.3
Pancreas	484	18.6	935	63.9	362	13.9	882	60.3
Larynx	233	8.9	230	15.7	51	2.0	88	6.0
Lung and Bronchus	2,430	93.2	5,343	365.3	1,569	60.1	3,979	272.0
Bone	25	1.0	27	1.8	16	0.6	16	1.1
Soft Tissue	110	4.2	169	11.6	48	1.8	69	4.7
Melanoma (Skin)	972	37.3	1,402	95.8	93	3.6	196	13.4
Female Breast	4,589	338.7	4,254	513.9	461	34.0	760	91.8
Cervix Uteri	184	13.6	60	7.2	55	4.1	50	6.0
Uterus (Corpus, NOS)	797	58.8	714	86.3	100	7.4	210	25.4
Ovary	242	17.9	301	36.4	104	7.7	291	35.2
Prostate	2,693	214.8	3,467	545.9	122	9.7	777	122.4
Testes	37	3.0	7	1.1	2	0.2	5	0.8
Urinary Bladder	532	20.4	1,677	114.6	74	2.8	421	28.8
Kidney	781	29.9	919	62.8	125	4.8	311	21.3
Endocrine	558	21.4	342	23.4	23	0.9	65	4.4
Multiple Myeloma	263	10.1	576	39.4	95	3.6	362	24.7
Leukemia	392	15.0	791	54.1	129	4.9	524	35.8
Brain and Other CNS	186	7.1	260	17.8	178	6.8	251	17.2
Hodgkin Disease	69	2.6	47	3.2	14	0.5	20	1.4
Non-Hodgkin Lymphoma	562	21.5	1,075	73.5	128	4.9	451	30.8
Other Cancers	1,128	43.2	2,190	149.7	480	18.4	1,353	92.5

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 6: 2014 Top Ten Cancer Incidence and Mortality by Age Group

Ages 0 to 19

Incidence	Cases	Rate	Mortality	Deaths	Rate
Brain and Other CNS	69	2.7	Leukemia	16	0.6
Leukemia	34	1.3	Brain and Other CNS	13	0.5
Endocrine	31	1.2	Bone	11	0.4
Non-Hodgkin Lymphoma	24	0.9	Endocrine	8	0.3
Bone	24	0.9	Soft Tissue	5	0.2
Hodgkin Disease	23	0.9	Kidney	2	0.1
Testes	11	0.8	Melanoma (Skin)	2	0.1
Soft Tissue	17	0.7	Testes	1	0.1
Melanoma (Skin)	14	0.5	Liver	1	0.0
Kidney	7	0.3			

Ages 20 to 44

Incidence	Cases	Rate	Mortality	Deaths	Rate
Female Breast	943	56.7	Female Breast	87	5.2
Endocrine	392	11.8	Colon and Rectum	69	2.1
Melanoma (Skin)	329	9.9	Lung and Bronchus	51	1.5
Testes	151	9.2	Cervix Uteri	22	1.3
Cervix Uteri	149	9.0	Brain and Other CNS	41	1.2
Colon and Rectum	249	7.5	Leukemia	33	1.0
Corpus Uteri	117	7.0	Non-Hodgkin Lymphoma	25	0.8
Kidney	149	4.5	Soft Tissue	22	0.7
Non-Hodgkin Lymphoma	148	4.5	Liver	21	0.6
Leukemia	116	3.5	Melanoma (Skin)	15	0.5

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 6 (continued): 2014 Top Ten Cancer Incidence and Mortality by Age Group

Ages 45 to 64

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	4,589	338.7	Lung and Bronchus	1,569	60.1
Prostate	2,693	214.8	Female Breast	461	34.0
Lung and Bronchus	2,430	93.2	Colon and Rectum	475	18.2
Colon and Rectum	1,579	60.5	Pancreas	362	13.9
Corpus Uteri	797	58.8	Liver	340	13.0
Melanoma (Skin)	972	37.3	Prostate	122	9.7
Kidney	781	29.9	Ovary	104	7.7
Oral Cavity	713	27.3	Corpus Uteri	100	7.4
Non-Hodgkin Lymphoma	562	21.5	Brain and Other CNS	178	6.8
Endocrine	558	21.4	Esophagus	164	6.3

Ages 65 and above

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	3,467	545.9	Lung and Bronchus	3,979	272.0
Female Breast	4,254	513.9	Prostate	777	122.4
Lung and Bronchus	5,343	365.3	Female Breast	760	91.8
Colon and Rectum	2,269	155.1	Colon and Rectum	1,060	72.5
Urinary Bladder	1,677	114.6	Pancreas	882	60.3
Melanoma (Skin)	1,402	95.8	Leukemia	524	35.8
Corpus Uteri	714	86.3	Ovary	291	35.2
Non-Hodgkin Lymphoma	1,075	73.5	Non-Hodgkin Lymphoma	451	30.8
Pancreas	935	63.9	Urinary Bladder	421	28.8
Kidney	919	62.8	Liver	405	27.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 7: 2014 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	26,161	498.4	27,407	445.3	10,344	209.7	8,957	140.1
Oral Cavity and Pharynx	1,040	19.0	381	6.1	254	4.8	91	1.4
Lip	26	0.6	21	0.3	2	0.0	0	0.0
Tongue	350	6.3	100	1.6	74	1.4	25	0.4
Salivary Glands	76	1.6	55	0.9	25	0.6	12	0.2
Floor of Mouth	56	1.0	14	0.2	2	0.0	0	0.0
Nasopharynx	26	0.5	19	0.3	10	0.2	6	0.1
Oropharynx	66	1.1	20	0.3	33	0.6	16	0.2
Hypopharynx	71	1.3	9	0.1	10	0.2	3	0.0
Other Mouth and Pharynx	369	6.6	143	2.2	98	1.8	29	0.4
Digestive System	4,844	92.4	3,924	62.5	2,686	52.4	1,965	30.6
Esophagus	432	7.9	99	1.5	341	6.4	85	1.3
Stomach	401	7.6	289	4.7	179	3.5	126	2.0
Small Intestine	164	3.2	174	2.8	32	0.7	23	0.4
Colon and Rectum	2,123	41.2	1,981	31.8	833	17.0	761	11.9
Anus and Anal Canal	64	1.3	164	2.6	12	0.2	19	0.3
Liver and Intrahepatic Bile Duct	693	12.5	263	4.1	544	10.0	223	3.5
Gallbladder	51	1.0	72	1.2	33	0.6	45	0.7
Pancreas	771	14.9	693	10.8	657	12.8	598	9.3
Other Digestive Organs	145	2.9	189	3.0	55	1.1	85	1.3
Respiratory System	4,776	91.6	3,735	58.0	3,329	65.6	2,449	38.1
Larynx	375	6.9	102	1.5	92	1.8	47	0.8
Lung and Bronchus	4,291	82.5	3,588	55.7	3,207	63.1	2,392	37.1
Other Respiratory Organs	110	2.2	45	0.7	30	0.6	10	0.2
Bones and Joints	47	1.0	53	1.0	28	0.6	24	0.4
Soft Tissue including Heart	185	3.7	163	2.8	76	1.5	68	1.1
Malignant Melanoma of the Skin	1,657	32.9	1,056	17.9	199	4.2	107	1.7
Breast	83	1.6	9,787	160.2	23	0.4	1,308	20.8
Invasive Breast	78	1.5	7,946	129.9				
In Situ Breast	5	0.1	1,841	30.3				
Female Genital System	.	.	2,930	47.6	.	.	920	14.4
Cervix Uteri, Invasive	.	.	393	7.5	.	.	127	2.2
Uterus (Corpus, NOS)	.	.	1,628	25.5	.	.	313	4.8
Ovary	.	.	597	9.7	.	.	404	6.3
Other Female Genital Organs	.	.	312	5.0	.	.	76	1.1

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 7 (continued): 2014 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	6,454	114.6	.	.	923	21.0	.	.
Prostate	6,197	109.2	.	.	900	20.5	.	.
Testis	206	4.4	.	.	12	0.3	.	.
Penis	39	0.8	.	.	9	0.2	.	.
Other Male Genital Organs	12	0.2	.	.	2	0.0	.	.
Urinary System	2,910	58.3	1,299	20.5	684	14.6	297	4.5
Urinary Bladder	1,701	35.1	549	8.5	355	7.9	145	2.2
Kidney and Renal Pelvis	1,144	21.8	711	11.4	311	6.3	138	2.1
Ureter	46	0.9	29	0.5	10	0.2	8	0.1
Other Urinary Organs	19	0.4	10	0.1	8	0.2	6	0.1
Eye and Orbit	30	0.6	42	0.7	10	0.2	6	0.1
Brain and Other CNS	343	6.8	283	5.0	250	4.9	233	3.7
Endocrine System	349	6.8	974	18.0	55	1.1	47	0.7
Thyroid Gland	320	6.2	942	17.4	28	0.5	34	0.5
Other Endocrine and Thymus	29	0.6	32	0.5	27	0.6	13	0.2
Lymphomas	1,113	22.1	936	15.4	348	7.3	297	4.7
Hodgkin Disease	137	2.8	113	2.1	23	0.5	18	0.3
Non-Hodgkin Lymphoma	976	19.3	823	13.3	325	6.9	279	4.4
Multiple Myeloma	481	9.4	383	6.0	236	5.0	226	3.5
Leukemia	773	15.5	559	9.2	406	8.8	296	4.7
Acute Lymphocytic Leukemia	22	0.5	6	0.1	23	0.5	15	0.3
Chronic Lymphocytic Leukemia	300	5.9	202	3.1	99	2.3	57	0.8
Acute Myeloid Leukemia	243	4.8	212	3.6	167	3.5	133	2.2
Chronic Myeloid Leukemia	119	2.4	83	1.4	22	0.5	18	0.3
Other Leukemia	89	1.9	56	0.9	95	2.1	73	1.2
Other Cancers - Uncategorized	2,965	59.8	2,174	36.2	837	17.3	623	9.6

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 8: 2014 Top Ten Cancer Incidence and Mortality Sites by Gender

Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	6,197	109.2	Lung and Bronchus	3,207	63.1
Lung and Bronchus	4,291	82.5	Prostate	900	20.5
Colon and Rectum	2,123	41.2	Colon and Rectum	840	17.2
Urinary Bladder	1,701	35.1	Pancreas	657	12.8
Melanoma (Skin)	1,657	32.9	Liver	544	10.0
Kidney	1,144	21.8	Leukemia	406	8.8
Non-Hodgkin Lymphoma	983	19.5	Urinary Bladder	355	7.9
Oral Cavity	1,040	19.0	Non-Hodgkin Lymphoma	325	6.9
Leukemia	773	15.5	Esophagus	341	6.4
Pancreas	771	14.9	Kidney	311	6.3

Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	9,787	160.2	Lung and Bronchus	2,392	37.1
Lung and Bronchus	3,588	55.7	Female Breast	1,308	20.8
Colon and Rectum	1,981	31.8	Colon and Rectum	764	12.0
Corpus Uteri	1,628	25.5	Pancreas	598	9.3
Endocrine	974	18.0	Ovary	404	6.3
Melanoma (Skin)	1,056	17.9	Corpus Uteri	313	4.8
Non-Hodgkin Lymphoma	825	13.3	Leukemia	296	4.7
Kidney	711	11.4	Non-Hodgkin Lymphoma	279	4.4
Pancreas	693	10.8	Brain and Other CNS	233	3.7
Ovary	597	9.7	Liver	223	3.5

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 9: 2014 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	41,205	458.4	11,635	456.8	14,877	163.8	4,259	180.5
Oral Cavity and Pharynx	1,161	12.7	239	9.1	257	2.8	86	3.3
Lip	35	0.4	7	0.3	1	0.0	1	0.0
Tongue	381	4.1	63	2.5	78	0.8	21	0.8
Salivary Glands	104	1.2	25	1.0	34	0.4	3	0.1
Floor of Mouth	58	0.6	12	0.4	0	0.0	2	0.1
Nasopharynx	36	0.4	9	0.3	12	0.1	4	0.1
Oropharynx	61	0.6	23	0.8	36	0.4	13	0.5
Hypopharynx	56	0.6	24	0.8	9	0.1	4	0.2
Other Mouth and Pharynx	430	4.7	76	2.8	87	0.9	38	1.5
Digestive System	6,485	71.6	2,214	88.6	3,370	36.9	1,225	50.6
Esophagus	427	4.5	102	4.0	336	3.6	87	3.4
Stomach	474	5.2	205	8.4	189	2.1	109	4.7
Small Intestine	237	2.7	99	3.8	41	0.5	14	0.6
Colon and Rectum	3,085	34.5	986	39.9	1,160	12.9	421	18.1
Anus and Anal Canal	183	2.0	44	1.7	20	0.2	11	0.5
Liver and Intrahepatic Bile Duct	673	7.2	275	10.1	547	5.9	207	7.6
Gallbladder	73	0.8	50	2.2	44	0.5	31	1.3
Pancreas	1,072	11.7	383	15.9	931	10.1	310	13.2
Other Digestive Organs	261	2.9	70	2.7	102	1.1	35	1.5
Respiratory System	6,747	72.6	1,723	70.1	4,642	50.4	1,112	46.6
Larynx	338	3.6	134	5.1	91	1.0	48	2.0
Lung and Bronchus	6,277	67.5	1,566	64.2	4,521	49.0	1,054	44.2
Other Respiratory Organs	132	1.5	23	0.8	30	0.3	10	0.4
Bones and Joints	82	1.1	17	0.7	34	0.4	17	0.7
Soft Tissue including Heart	275	3.2	70	2.8	99	1.2	44	1.7
Malignant Melanoma of the Skin	2,583	29.8	35	1.5	297	3.4	9	0.4
Breast	7,390	83.7	2,422	93.8	959	10.7	358	14.7
Invasive Breast	6,025	68.2	1,956	76.3				
In Situ Breast	1,365	15.6	466	17.5				
Female Genital System	2,220	47.4	676	46.4	668	13.3	240	17.2
Cervix Uteri, Invasive	270	7.1	118	8.3	76	1.8	48	3.3
Uterus (Corpus, NOS)	1,218	25.0	396	26.7	209	4.0	101	7.3
Ovary	483	10.2	105	7.5	318	6.4	80	5.8
Other Female Genital Organs	249	5.1	57	3.9	65	1.2	11	0.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 9 (continued): 2014 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	4,360	97.9	1,859	160.0	651	17.9	266	35.4
Prostate	4,142	91.7	1,825	156.8	636	17.6	259	34.6
Testis	180	5.3	22	1.9	8	0.2	3	0.3
Penis	31	0.8	7	1.0	6	0.1	3	0.4
Other Male Genital Organs	7	0.1	5	0.4	1	0.0	1	0.1
Urinary System	3,458	38.3	717	29.3	816	9.0	160	7.2
Urinary Bladder	1,936	21.3	293	12.7	424	4.7	74	3.5
Kidney and Renal Pelvis	1,433	16.0	409	16.0	365	4.0	81	3.4
Ureter	68	0.8	7	0.4	13	0.1	5	0.2
Other Urinary Organs	21	0.2	8	0.4	14	0.2	0	0.0
Eye and Orbit	68	0.8	*	*	16	0.2	0	0.0
Brain and Other CNS	512	6.2	107	4.1	418	4.8	59	2.4
Endocrine System	1,044	13.4	268	10.1	77	0.9	23	1.0
Thyroid Gland	1,000	12.8	251	9.4	48	0.5	14	0.6
Other Endocrine and Thymus	44	0.5	17	0.7	29	0.4	9	0.4
Lymphomas	1,652	18.9	365	14.1	543	6.0	91	3.8
Hodgkin Disease	179	2.4	68	2.5	33	0.4	6	0.2
Non-Hodgkin Lymphoma	1,473	16.5	297	11.6	510	5.7	85	3.5
Multiple Myeloma	546	6.0	299	12.5	301	3.4	154	6.9
Leukemia	1,083	12.3	217	8.8	580	6.6	115	5.1
Acute Lymphocytic Leukemia	18	0.3	9	0.3	26	0.3	7	0.2
Chronic Lymphocytic Leukemia	420	4.6	65	2.6	136	1.5	20	1.0
Acute Myeloid Leukemia	369	4.3	85	3.4	247	2.8	52	2.2
Chronic Myeloid Leukemia	150	1.8	41	1.7	30	0.4	10	0.5
Other Leukemia	126	1.5	17	0.7	141	1.6	26	1.2
Other Cancers - Uncategorized	4,479	51.7	526	21.8	1,149	12.7	300	13.1

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 10: 2014 Top Ten Cancer Incidence and Mortality Sites by Race

Whites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	7,330	157.2	Lung and Bronchus	4,521	49.0
Prostate	4,142	91.7	Female Breast	942	19.1
Lung and Bronchus	6,277	67.5	Prostate	636	17.6
Colon and Rectum	3,085	34.5	Colon and Rectum	1,169	13.0
Melanoma (Skin)	2,583	29.8	Pancreas	931	10.1
Corpus Uteri	1,218	25.0	Leukemia	580	6.6
Urinary Bladder	1,936	21.3	Ovary	318	6.4
Non-Hodgkin Lymphoma	1,479	16.6	Liver	547	5.9
Kidney	1,433	16.0	Non-Hodgkin Lymphoma	510	5.7
Endocrine	1,044	13.4	Brain and Other CNS	418	4.8

Minorities

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	2,399	164.1	Lung and Bronchus	1,054	44.2
Prostate	1,825	156.8	Prostate	259	34.6
Lung and Bronchus	1,566	64.2	Female Breast	352	24.8
Colon and Rectum	986	39.9	Colon and Rectum	422	18.1
Corpus Uteri	396	26.7	Pancreas	310	13.2
Kidney	409	16.0	Liver	207	7.6
Pancreas	383	15.9	Corpus Uteri	101	7.3
Urinary Bladder	293	12.7	Multiple Myeloma	154	6.9
Multiple Myeloma	299	12.5	Ovary	80	5.8
Non-Hodgkin Lymphoma	300	11.7	Leukemia	115	5.1

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 11: 2014 Top Ten Cancer Incidence and Mortality by Race and Gender

White Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,142	91.7	Lung and Bronchus	2,543	62.0
Lung and Bronchus	3,343	79.8	Prostate	636	17.6
Colon and Rectum	1,606	39.4	Colon and Rectum	625	15.8
Melanoma (Skin)	1,574	39.0	Pancreas	493	11.9
Urinary Bladder	1,487	37.5	Liver	384	9.1
Kidney	908	21.8	Leukemia	337	9.0
Non-Hodgkin Lymphoma	823	20.3	Urinary Bladder	312	8.4
Oral Cavity	858	19.9	Non-Hodgkin Lymphoma	280	7.2
Leukemia	627	15.7	Esophagus	274	6.5
Pancreas	576	13.8	Kidney	257	6.4
Prostate	4,142	91.7	Lung and Bronchus	2,543	62.0

White Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	7,330	157.2	Lung and Bronchus	1,978	38.9
Lung and Bronchus	2,934	58.1	Female Breast	942	19.1
Colon and Rectum	1,479	30.7	Colon and Rectum	544	10.7
Corpus Uteri	1,218	25.0	Pancreas	438	8.5
Melanoma (Skin)	1,005	22.6	Ovary	318	6.4
Endocrine	750	19.2	Leukemia	243	4.9
Non-Hodgkin Lymphoma	655	13.5	Non-Hodgkin Lymphoma	230	4.5
Kidney	525	11.0	Brain and Other CNS	199	4.1
Ovary	483	10.2	Corpus Uteri	209	4.0
Pancreas	496	9.8	Liver	163	3.3

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 11 (continued): 2014 Top Ten Cancer Incidence and Mortality by Race and Gender

Minority Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,825	156.8	Lung and Bronchus	647	65.5
Lung and Bronchus	926	91.8	Prostate	259	34.6
Colon and Rectum	498	46.6	Colon and Rectum	211	22.2
Urinary Bladder	200	21.8	Pancreas	158	16.2
Kidney	229	20.4	Liver	151	12.1
Pancreas	192	19.3	Multiple Myeloma	63	7.3
Liver	202	16.7	Leukemia	64	6.7
Multiple Myeloma	148	15.0	Oral Cavity	70	6.2
Oral Cavity	169	14.3	Stomach	63	6.0
Non-Hodgkin Lymphoma	143	13.1	Esophagus	64	5.8

Minority Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	2,399	164.1	Lung and Bronchus	407	29.8
Lung and Bronchus	640	45.4	Female Breast	352	24.8
Colon and Rectum	488	34.7	Colon and Rectum	211	15.3
Corpus Uteri	396	26.7	Pancreas	152	11.3
Endocrine	214	14.5	Corpus Uteri	101	7.3
Pancreas	191	13.7	Multiple Myeloma	91	6.7
Kidney	180	12.5	Ovary	80	5.8
Non-Hodgkin Lymphoma	157	10.8	Liver	56	4.0
Multiple Myeloma	151	10.7	Leukemia	51	3.9
Cervix Uteri	118	8.3	Stomach	46	3.5

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 12: 2010 – 2014 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Males

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	160	3.6	Brain and Other CNS	35	0.8
Leukemia	69	1.5	Leukemia	21	0.5
Hodgkin Disease	54	1.2	Soft Tissue	14	0.3
Bone	53	1.2	Endocrine	14	0.3
Soft Tissue	49	1.1	Bone	8	0.2
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Testes	705	12.0	Colon and Rectum	117	2.0
Melanoma (Skin)	691	11.7	Brain and Other CNS	109	1.8
Colon and Rectum	486	8.2	Lung and Bronchus	96	1.6
Endocrine	382	6.5	Leukemia	62	1.1
Non-Hodgkin Lymphoma	339	5.8	Melanoma (Skin)	57	1.0
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	9,201	195.1	Lung and Bronchus	3,467	73.5
Lung and Bronchus	5,087	107.9	Colon and Rectum	915	19.4
Colon and Rectum	2,989	63.4	Liver	787	16.7
Melanoma (Skin)	2,528	53.6	Pancreas	737	15.6
Oral Cavity	2,138	45.3	Esophagus	558	11.8
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	13,448	557.1	Lung and Bronchus	9,131	378.3
Lung and Bronchus	11,632	481.9	Prostate	2,674	110.8
Urinary Bladder	5,324	220.6	Colon and Rectum	1,929	79.9
Colon and Rectum	4,512	186.9	Pancreas	1,534	63.6
Melanoma (Skin)	3,947	163.5	Leukemia	1,247	51.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 12 (continued): 2010 – 2014 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	130	3.1	Leukemia	24	0.6
Endocrine	72	1.7	Brain and Other CNS	20	0.5
Leukemia	43	1.0	Endocrine	9	0.2
Hodgkin Disease	38	0.9	Bone	8	0.2
Kidney	36	0.8	Soft Tissue	6	0.1
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	3,224	56.2	Female Breast	233	4.1
Endocrine	1,318	23.0	Lung and Bronchus	102	1.8
Melanoma (Skin)	979	17.1	Colon and Rectum	84	1.5
Cervix Uteri	517	9.0	Cervix Uteri	74	1.3
Colon and Rectum	437	7.6	Brain and Other CNS	68	1.2
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	15,969	323.3	Lung and Bronchus	2,480	50.2
Lung and Bronchus	4,202	85.1	Female Breast	1,566	31.7
Corpus Uteri	2,837	57.4	Colon and Rectum	615	12.4
Colon and Rectum	2,393	48.4	Pancreas	475	9.6
Melanoma (Skin)	1,903	38.5	Ovary	470	9.5
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	16,132	519.9	Lung and Bronchus	6,958	224.3
Lung and Bronchus	9,645	310.9	Female Breast	2,906	93.7
Colon and Rectum	4,492	144.8	Colon and Rectum	1,857	59.9
Corpus Uteri	2,518	81.2	Pancreas	1,598	51.5
Non-Hodgkin Lymphoma	2,176	70.1	Ovary	1,232	39.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 12 (continued): 2010 – 2014 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Males

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	52	2.5	Brain and Other CNS	14	0.7
Leukemia	32	1.5	Leukemia	11	0.5
Non-Hodgkin Lymphoma	29	1.4	Endocrine	8	0.4
Bone	21	1.0	Bone	4	0.2
Kidney	18	0.9	Soft Tissue	3	0.1
			Liver	1	0.0
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Colon and Rectum	175	7.8	Colon and Rectum	46	2.0
Non-Hodgkin Lymphoma	137	6.1	Lung and Bronchus	30	1.3
Kidney	117	5.2	Non-Hodgkin Lymphoma	26	1.2
Prostate	99	4.4	Brain and Other CNS	24	1.1
Hodgkin Disease	84	3.7	Stomach	24	1.1
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,830	332.0	Lung and Bronchus	1,297	89.1
Lung and Bronchus	1,850	127.2	Liver	425	29.2
Colon and Rectum	1,211	83.2	Colon and Rectum	417	28.7
Liver	601	41.3	Pancreas	317	21.8
Kidney	594	40.8	Prostate	229	15.7
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,319	891.5	Lung and Bronchus	2,004	413.6
Lung and Bronchus	2,508	517.7	Prostate	1,137	234.7
Colon and Rectum	1,081	223.1	Colon and Rectum	559	115.4
Urinary Bladder	572	118.1	Pancreas	361	74.5
Kidney	483	99.7	Multiple Myeloma	202	41.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 12 (continued): 2010 – 2014 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	41	2.0	Brain and Other CNS	12	0.6
Hodgkin Disease	27	1.3	Leukemia	7	0.3
Endocrine	25	1.2	Bone	7	0.3
Leukemia	22	1.1	Kidney	1	0.0
Soft Tissue	16	0.8	Soft Tissue	1	0.0
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	1,471	58.9	Female Breast	179	7.2
Endocrine	354	14.2	Colon and Rectum	43	1.7
Cervix Uteri	185	7.4	Cervix Uteri	33	1.3
Colon and Rectum	178	7.1	Lung and Bronchus	31	1.2
Corpus Uteri	159	6.4	Ovary	24	1.0
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	5,692	329.3	Female Breast	853	49.4
Lung and Bronchus	1,212	70.1	Lung and Bronchus	709	41.0
Colon and Rectum	1,066	61.7	Colon and Rectum	348	20.1
Corpus Uteri	788	45.6	Pancreas	211	12.2
Endocrine	501	29.0	Corpus Uteri	158	9.1
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	3,698	501.3	Lung and Bronchus	1,248	169.2
Lung and Bronchus	1,734	235.1	Female Breast	739	100.2
Colon and Rectum	1,188	161.0	Colon and Rectum	583	79.0
Corpus Uteri	764	103.6	Pancreas	491	66.6
Pancreas	568	77.0	Corpus Uteri	324	43.9

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Table 13: 2014 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Whites		Non-Hispanic Blacks		Non-Hispanic Whites		Non-Hispanic Blacks	
	Cases	**Rate**	**Cases**	**Rate**	**Deaths**	**Rate**	**Deaths**	**Rate**
All Cancers	40,317	467.2	10,266	472.5	14,726	167.1	3,915	191.7
Oral Cavity	1,144	13.0	207	9.1	256	2.8	78	3.5
Esophagus	423	4.6	94	4.3	333	3.7	80	3.5
Stomach	454	5.2	170	8.3	182	2.1	93	4.6
Colon and Rectum	3,026	35.2	862	40.5	1,161	13.3	393	19.5
Liver	652	7.2	222	9.4	539	6.0	181	7.6
Gallbladder	70	0.8	44	2.2	44	0.5	28	1.3
Pancreas	1,055	11.9	359	17.3	924	10.3	291	14.4
Larynx	329	3.6	125	5.5	91	1.0	43	2.1
Lung and Bronchus	6,218	68.8	1,402	66.6	4,494	50.1	964	46.6
Bone	79	1.2	12	0.6	33	0.5	16	0.7
Soft Tissue	259	3.2	59	2.8	98	1.2	41	1.9
Melanoma (Skin)	2,566	31.1	21	1.1	293	3.5	9	0.5
Female Breast	7,167	160.9	2,101	168.6	933	19.7	332	27.1
Cervix Uteri	255	7.3	97	8.2	76	1.9	45	3.6
Uterus (Corpus, NOS)	1,181	25.2	351	27.6	203	4.0	99	8.2
Ovary	472	10.4	87	7.3	311	6.4	72	6.0
Prostate	4,056	92.6	1,682	169.5	626	17.6	246	37.9
Testes	169	5.7	14	1.6	7	0.2	3	0.4
Urinary Bladder	1,916	21.7	252	12.6	423	4.8	70	3.8
Kidney	1,387	16.2	365	16.7	360	4.0	71	3.4
Endocrine	989	13.7	217	9.8	75	0.9	20	1.0
Multiple Myeloma	533	6.0	280	13.5	296	3.4	149	7.6
Leukemia	1,054	12.5	191	9.1	571	6.7	103	5.3
Brain and Other CNS	492	6.4	88	4.2	407	4.9	47	2.3
Hodgkin Disease	170	2.5	62	2.8	33	0.4	6	0.3
Non-Hodgkin Lymphoma	1,437	16.7	257	11.9	503	5.7	71	3.4
Other Cancers	2,764	32.5	645	30.9	1,454	16.5	364	18.2

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated. See Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.

Table 13 (continued): 2014 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Other Races		Hispanics		Non-Hispanic Other Races		Hispanics	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	1,803	585.9	1,190	308.6	320	117.7	340	122.5
Oral Cavity	48	16.1	22	5.9	7	2.6	4	2.3
Esophagus	8	2.8	6	1.5	7	2.3	6	2.6
Stomach	37	12.5	29	7.4	15	6.1	15	4.7
Colon and Rectum	136	44.6	80	21.9	29	11.1	21	7.2
Liver	50	15.0	32	10.4	22	7.3	25	7.3
Gallbladder	*	*	5	1.9	3	0.8	3	0.6
Pancreas	25	8.8	25	7.8	19	6.6	21	8.3
Larynx	12	3.3	11	2.5	4	1.4	1	0.5
Lung and Bronchus	178	59.6	81	28.2	86	30.4	55	22.4
Bone	5	1.3	*	*	1	0.3	2	0.2
Soft Tissue	9	3.3	21	5.0	2	0.7	3	0.4
Melanoma (Skin)	110	36.0	20	3.1	0	0.0	4	0.9
Female Breast	308	166.6	211	102.4	21	13.3	22	11.9
Cervix Uteri	18	9.5	23	8.4	3	1.5	3	1.6
Uterus (Corpus, NOS)	44	23.8	52	24.8	2	1.7	9	5.7
Ovary	19	10.9	19	9.2	6	3.5	15	7.7
Prostate	339	248.8	120	84.8	11	14.0	17	20.6
Testes	9	4.2	14	2.8	0	0.0	2	0.4
Urinary Bladder	52	20.9	30	12.1	4	2.3	3	1.9
Kidney	47	16.0	57	13.9	9	3.9	9	4.0
Endocrine	40	10.4	77	12.2	4	1.5	3	0.9
Multiple Myeloma	35	14.3	16	4.2	5	2.2	12	5.3
Leukemia	54	18.5	34	7.4	8	2.1	20	7.0
Brain and Other CNS	18	5.1	28	4.8	12	4.1	17	4.6
Hodgkin Disease	7	1.6	11	1.8	0	0.0	2	0.2
Non-Hodgkin Lymphoma	61	20.7	54	15.2	11	4.1	19	8.4
Other Cancers	130	47.0	108	26.8	29	11.3	27	10.1

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated. See Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.

Table 14: 2014 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Whites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	7,167	160.9	Lung and Bronchus	4,494	50.1
Prostate	4,056	92.6	Female Breast	933	19.7
Lung and Bronchus	6,218	68.8	Prostate	626	17.6
Colon and Rectum	3,026	35.2	Colon and Rectum	1,161	13.3
Melanoma (Skin)	2,566	31.1	Pancreas	924	10.3
Corpus Uteri	1,181	25.2	Leukemia	571	6.7
Urinary Bladder	1,916	21.7	Ovary	311	6.4
Non-Hodgkin Lymphoma	1,437	16.7	Liver	539	6.0
Kidney	1,387	16.2	Non-Hodgkin Lymphoma	503	5.7
Endocrine	989	13.7	Brain and Other CNS	407	4.9

Non-Hispanic Blacks

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,682	169.5	Lung and Bronchus	964	46.6
Female Breast	2,101	168.6	Prostate	246	37.9
Lung and Bronchus	1,402	66.6	Female Breast	332	27.1
Colon and Rectum	862	40.5	Colon and Rectum	393	19.5
Corpus Uteri	351	27.6	Pancreas	291	14.4
Pancreas	359	17.3	Corpus Uteri	99	8.2
Kidney	365	16.7	Liver	181	7.6
Multiple Myeloma	280	13.5	Multiple Myeloma	149	7.6
Urinary Bladder	252	12.6	Ovary	72	6.0
Non-Hodgkin Lymphoma	257	11.9	Leukemia	103	5.3

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated. See Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.

Table 14 (continued): 2014 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Other Races

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	339	248.8	Lung and Bronchus	86	30.4
Female Breast	308	166.6	Prostate	11	14.0
Lung and Bronchus	178	59.6	Female Breast	21	13.3
Colon and Rectum	136	44.6	Colon and Rectum	29	11.1
Melanoma (Skin)	110	36.0	Liver	22	7.3
Corpus Uteri	44	23.8	Pancreas	19	6.6
Urinary Bladder	52	20.9	Stomach	15	6.1
Non-Hodgkin Lymphoma	61	20.7	Brain and Other CNS	12	4.1
Leukemia	54	18.5	Non-Hodgkin Lymphoma	11	4.1
Oral Cavity	48	16.1	Kidney	9	3.9

Hispanics

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	211	102.4	Lung and Bronchus	55	22.4
Prostate	120	84.8	Prostate	17	20.6
Lung and Bronchus	81	28.2	Female Breast	22	11.9
Corpus Uteri	52	24.8	Non-Hodgkin Lymphoma	19	8.4
Colon and Rectum	80	21.9	Pancreas	21	8.3
Non-Hodgkin Lymphoma	54	15.2	Ovary	15	7.7
Kidney	57	13.9	Liver	25	7.3
Endocrine	77	12.2	Colon and Rectum	21	7.2
Urinary Bladder	30	12.1	Leukemia	20	7.0
Liver	32	10.4	Corpus Uteri	9	5.7

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated. See Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.

Table 15: 2014 Cancer Incidence and Mortality Median Age

Incidence

	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	66	66	65	67	63	63	56
Oral Cavity	62	61	67	63	61	62	56.5
Esophagus	66	66	66	66	61	69	57.5
Stomach	67	66	70	68.5	64	63	52
Colon and Rectum	66	66	67	67	63	61.5	56.5
Liver	64	63	68	66	61	62.5	62
Gallbladder	70	71	70	71.5	65	*	65
Pancreas	69	67	70	70	66	65	65
Larynx	64	64	63.5	64	64	60.5	51
Lung and Bronchus	69	69	70	70	67	67	63
Bone	46	48	46	49	44.5	17	*
Soft Tissue	64	65	62	66	54	69	49
Melanoma (Skin)	65	67	62	65	66	60.5	43.5
Female Breast	62	.	62	63	60	55	55
Cervix Uteri	48	.	48	48	49	50.5	46
Uterus (Corpus, NOS)	63	.	63	63	63	61	56
Ovary	65	.	65	66	63	64	57
Prostate	66	66	.	67	63	66	63
Testes	34	34	.	34	41	37	29
Urinary Bladder	72	72	71	72	68	71	68
Kidney	64	64	65	65	62	62	52
Endocrine	53	57	51	53	57	43.5	40
Multiple Myeloma	69	68	70	70	67	72	57
Leukemia	68	67	68	69	62	65	52.5
Brain and Other CNS	60	58	62	62	56.5	30.5	27.5
Hodgkin Disease	42	42	39	43.5	42	27	33
Non-Hodgkin Lymphoma	67	67	68	69	58	67	56.5
Other Cancers	68	67	69	70	63	65	54

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

*Median ages based on incidence counts less than five are suppressed.

Table 15 (continued): 2014 Cancer Incidence and Mortality Median Age

Mortality

	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	71	70	72	72	67	67	62.5
Oral Cavity	67	66	73	69	62.5	67	77
Esophagus	67	67	70	68	64	65	66
Stomach	70	68	73	72	65	72	62
Colon and Rectum	71	69	73	72	66	68	63.5
Liver	65	64	70	67	62	61.5	57
Gallbladder	69	66	70	70.5	66	61	59
Pancreas	71	69	74	72	68	68	67
Larynx	70	70	69	70	69	66.5	.
Lung and Bronchus	71	70	71	71	67	67	70
Bone	55	47.5	57	57	49	68	13.5
Soft Tissue	62	59	67	66	60	70	40
Melanoma (Skin)	71	71	72	71	70	.	55
Female Breast	68	.	68	69	62	64	49
Cervix Uteri	59	.	59	60	60	53	45
Uterus (Corpus, NOS)	70	.	70	71	69	82.5	63
Ovary	72	.	72	72	71	64	56
Prostate	78	78	.	79	75	76	81
Testes	55	55	.	71	52	.	28.5
Urinary Bladder	77	76	78	77	74	79.5	88
Kidney	71	70	75	72	68	77	68
Endocrine	68.5	67	70	69	67.5	68	44.5
Multiple Myeloma	75	74	76	76	72	78	68
Leukemia	75	74	76.5	76	71	52.5	40
Brain and Other CNS	65	62	67	66	64	50.5	53
Hodgkin Disease	64	59	73.5	69	58.5	.	24
Non-Hodgkin Lymphoma	73	72	74	75	64	70	76
Other Cancers	72	71	74	73	68	66	62

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

*Median ages based on incidence counts less than five are suppressed.

Figure 1a: 2003 – 2014 Colorectal Cancer Incidence Trends by Gender and Race

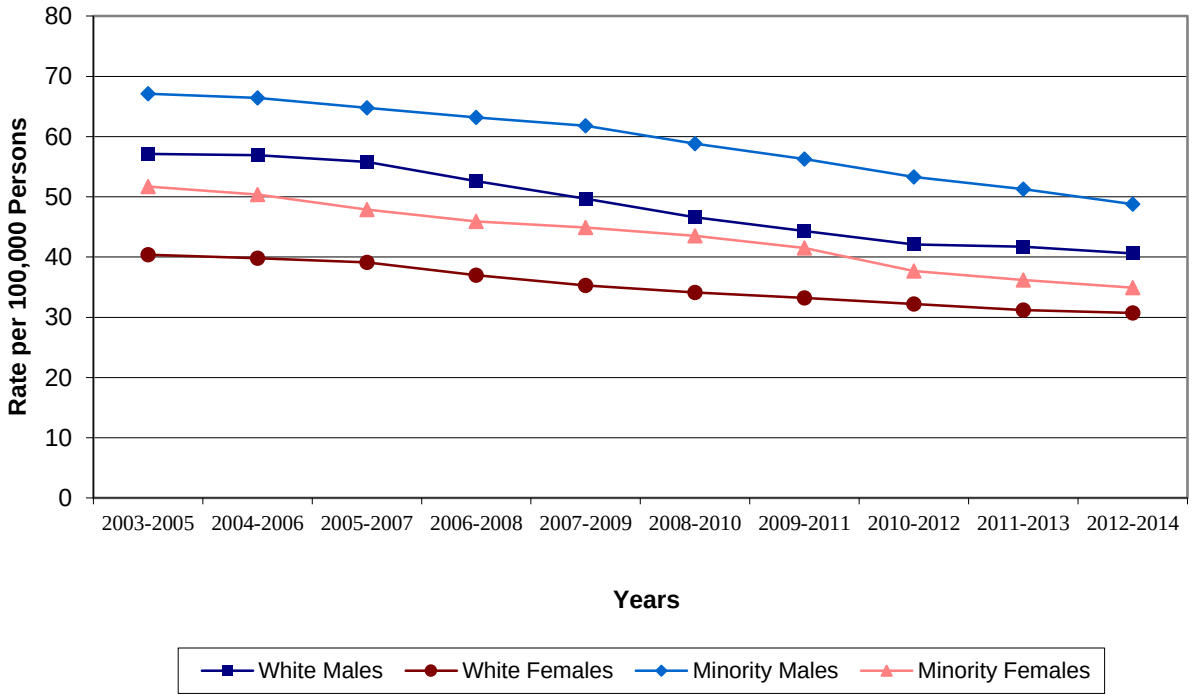


Figure 1b: 2003 – 2014 Colorectal Cancer Mortality Trends by Gender and Race

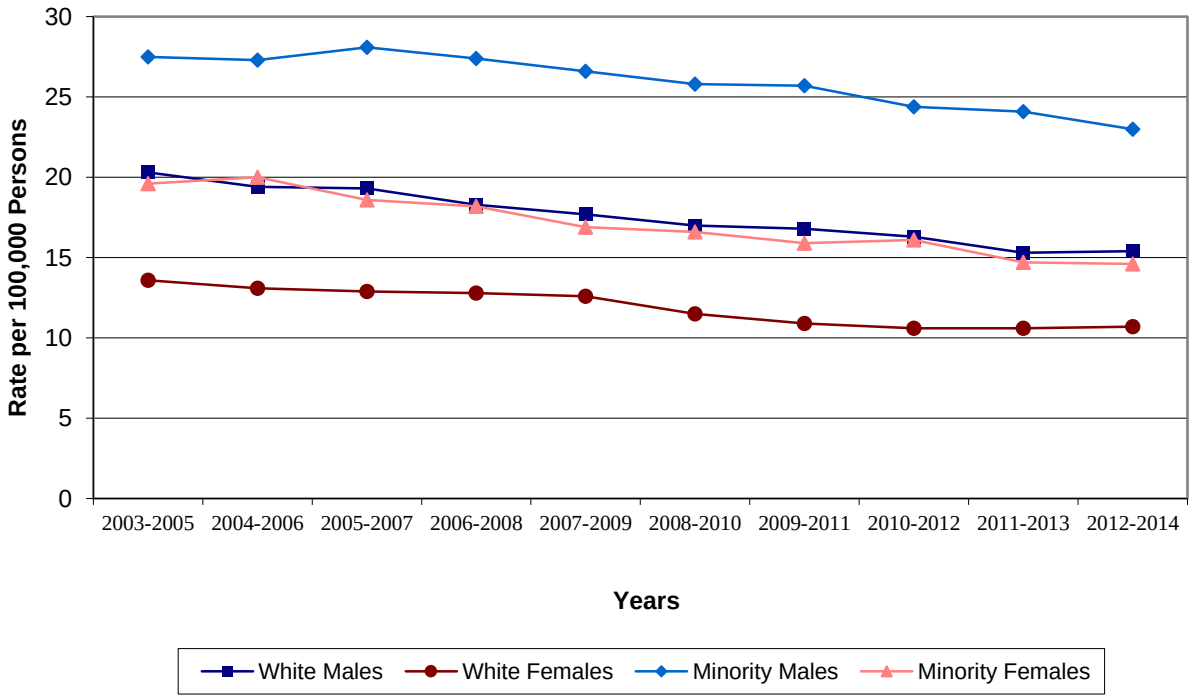


Figure 2a: 2003 – 2014 Lung and Bronchus Cancer Incidence Trends by Gender and Race

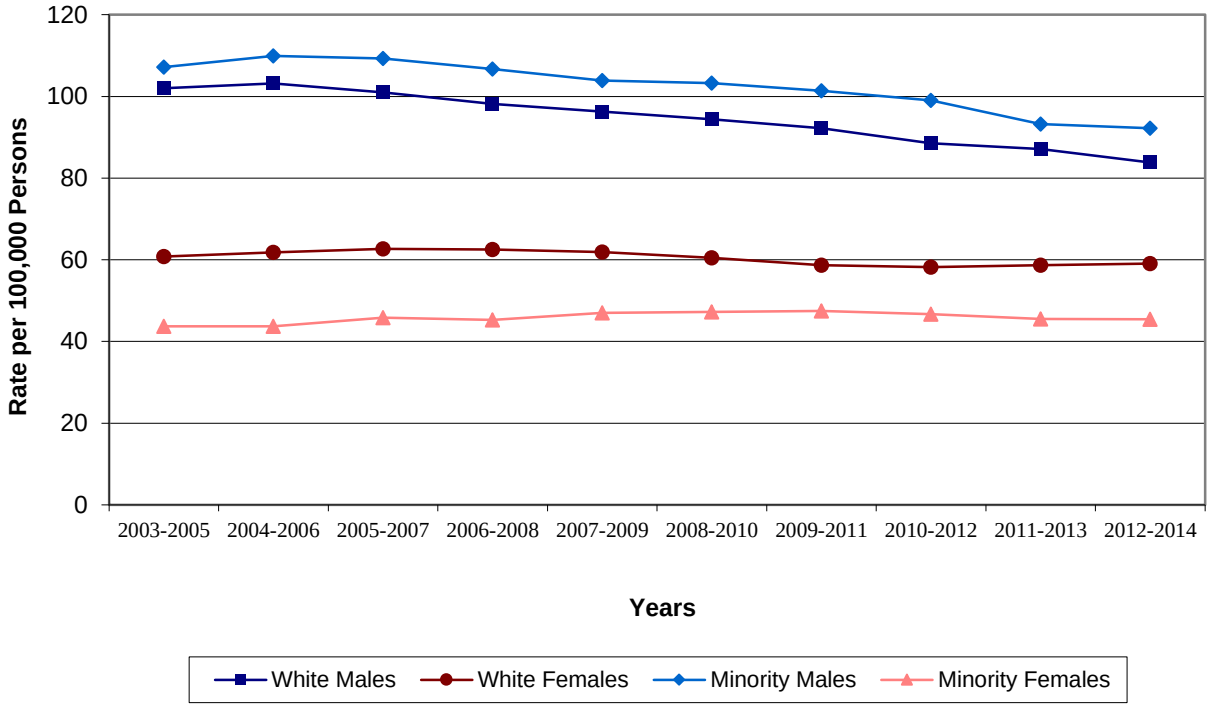


Figure 2b: 2003 – 2014 Lung and Bronchus Cancer Mortality Trends by Gender and Race

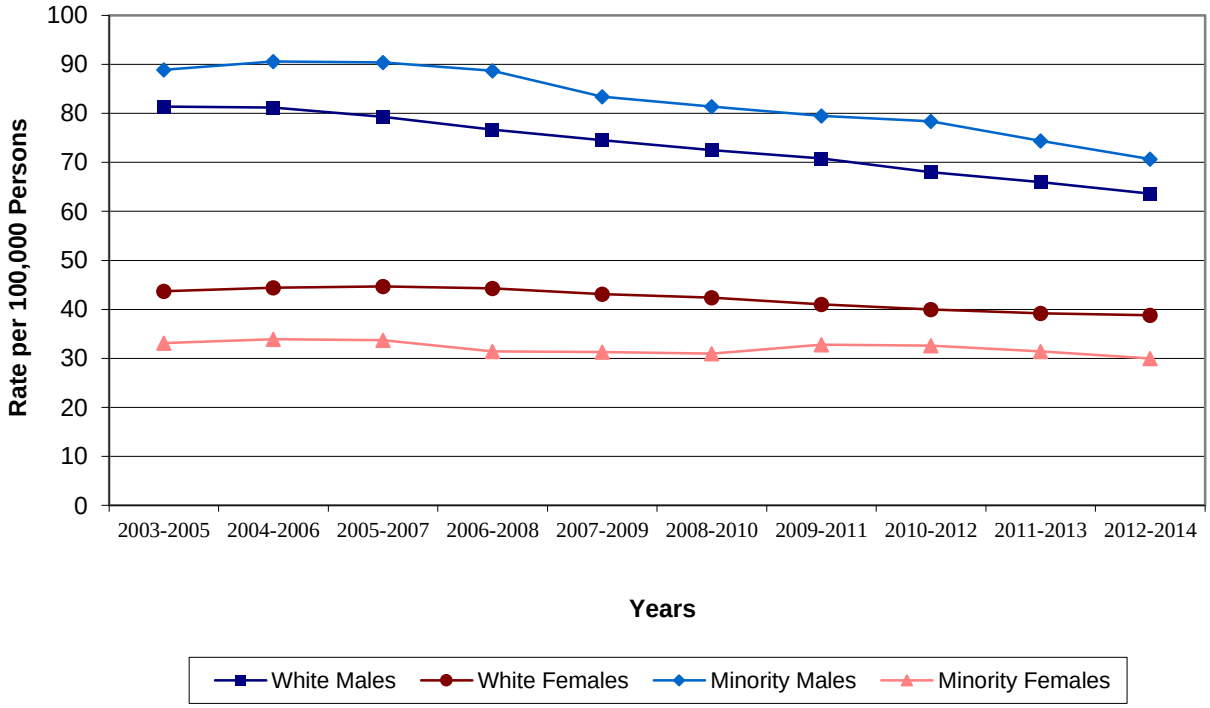


Figure 3a: 2003 – 2014 Female Breast Cancer Incidence Trends by Race

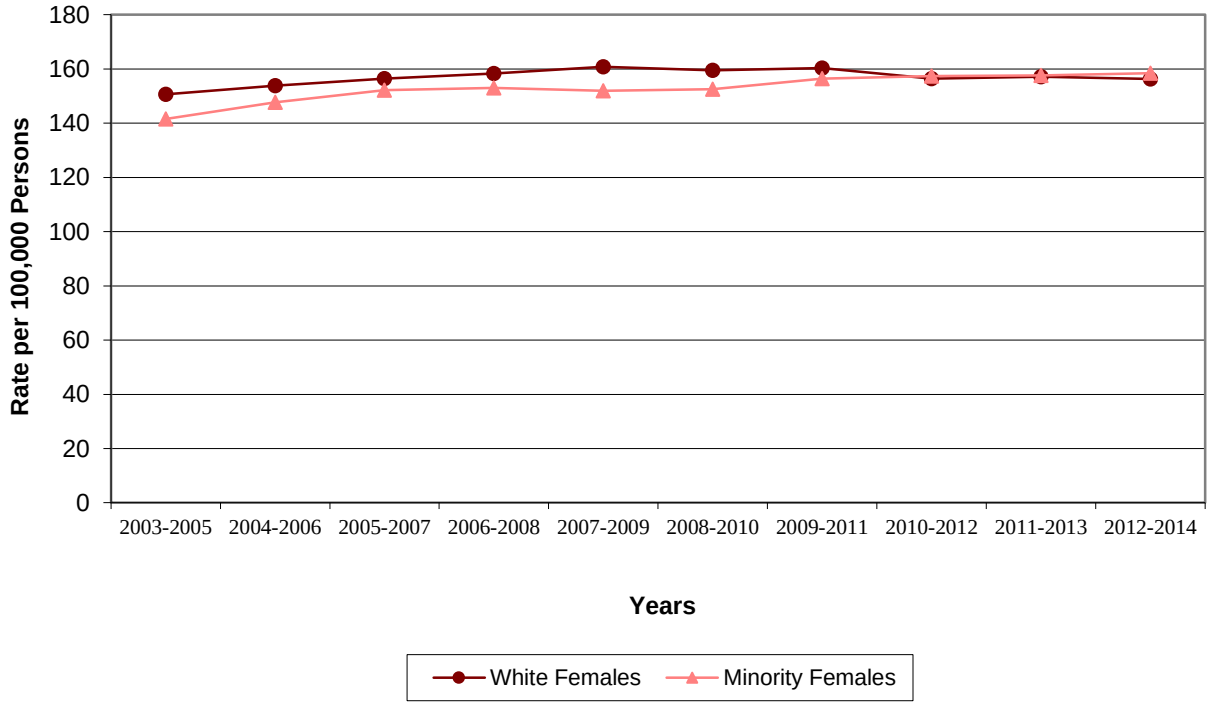


Figure 3b: 2003 – 2014 Female Breast Cancer Mortality Trends by Race

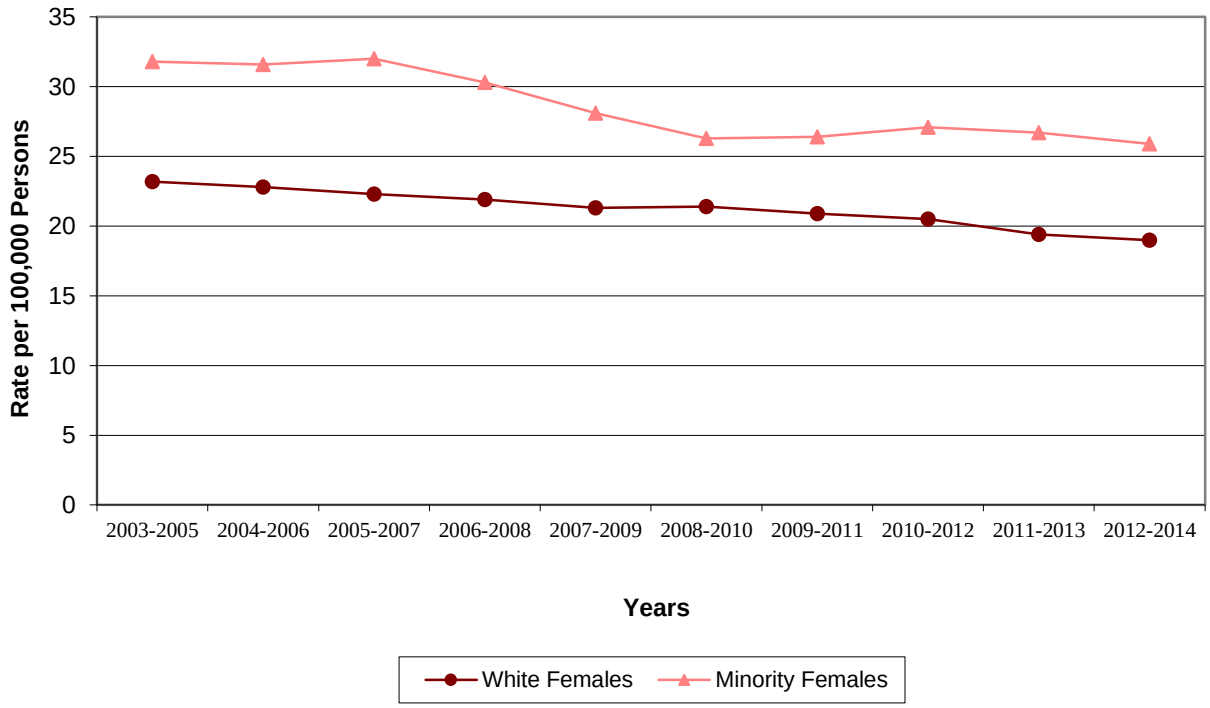


Figure 4a: 2003 – 2014 Prostate Cancer Incidence Trends by Race

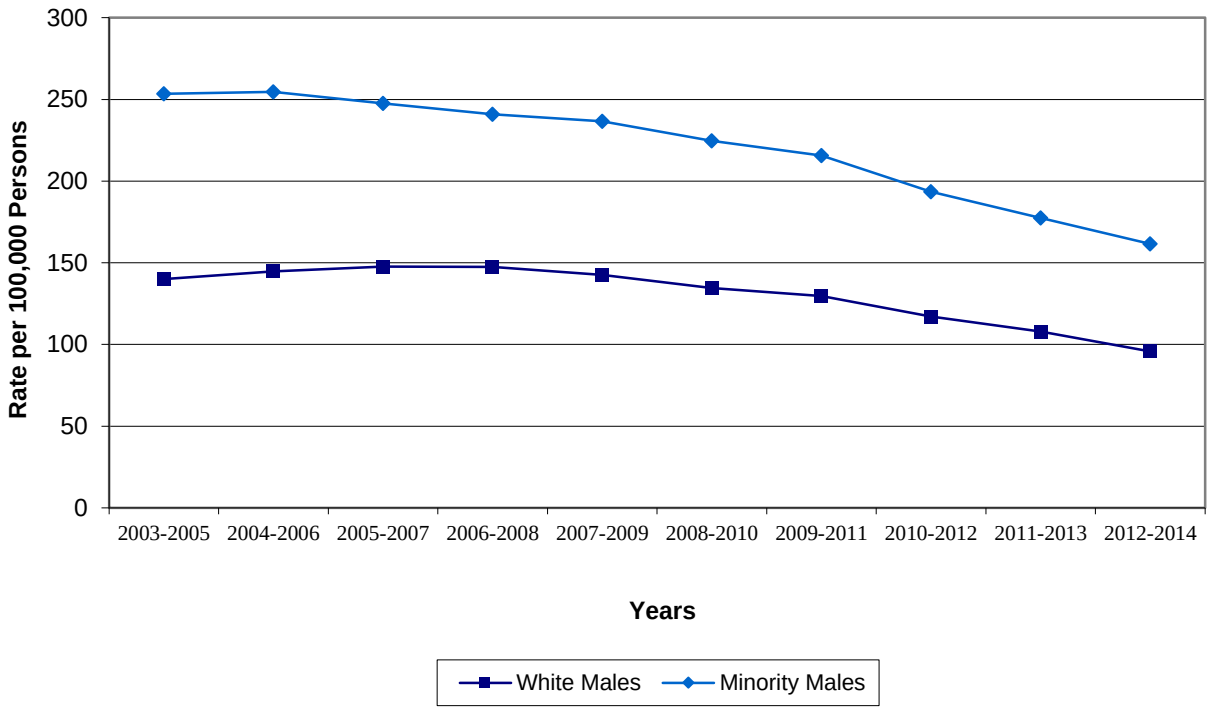


Figure 4b: 2003 – 2014 Prostate Cancer Mortality Trends by Race

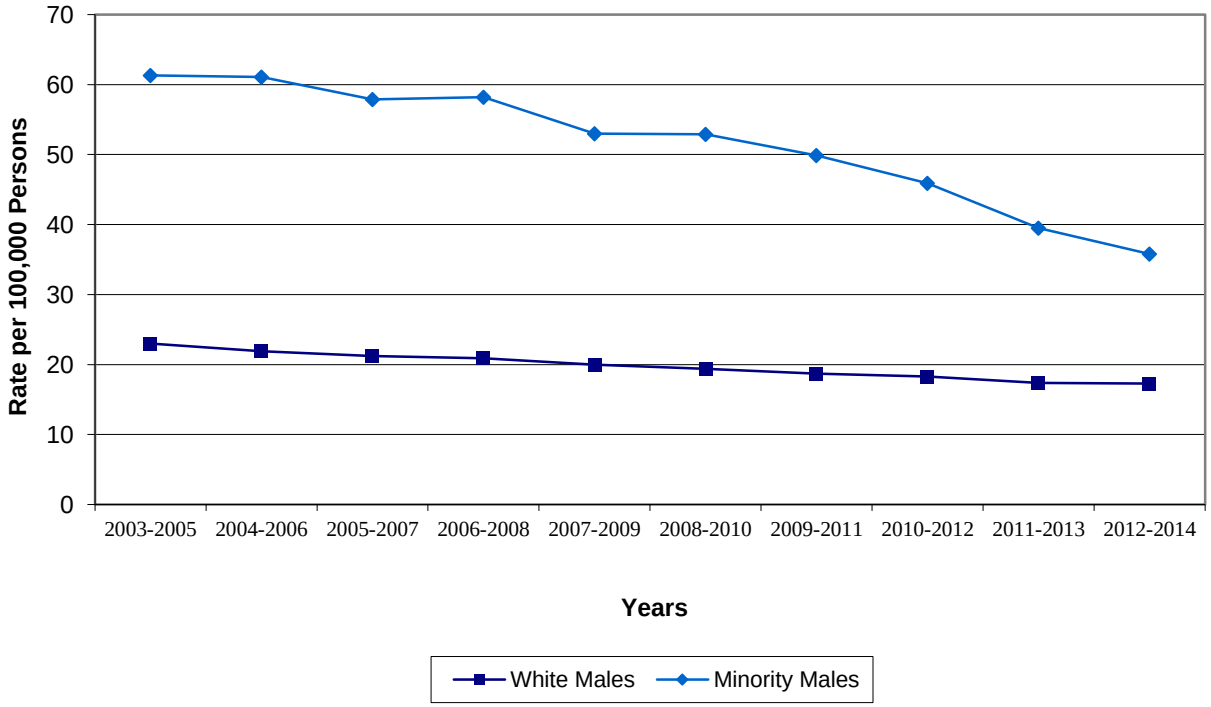


Figure 5a: 2003 – 2014 Cervical Cancer Incidence Trends by Race

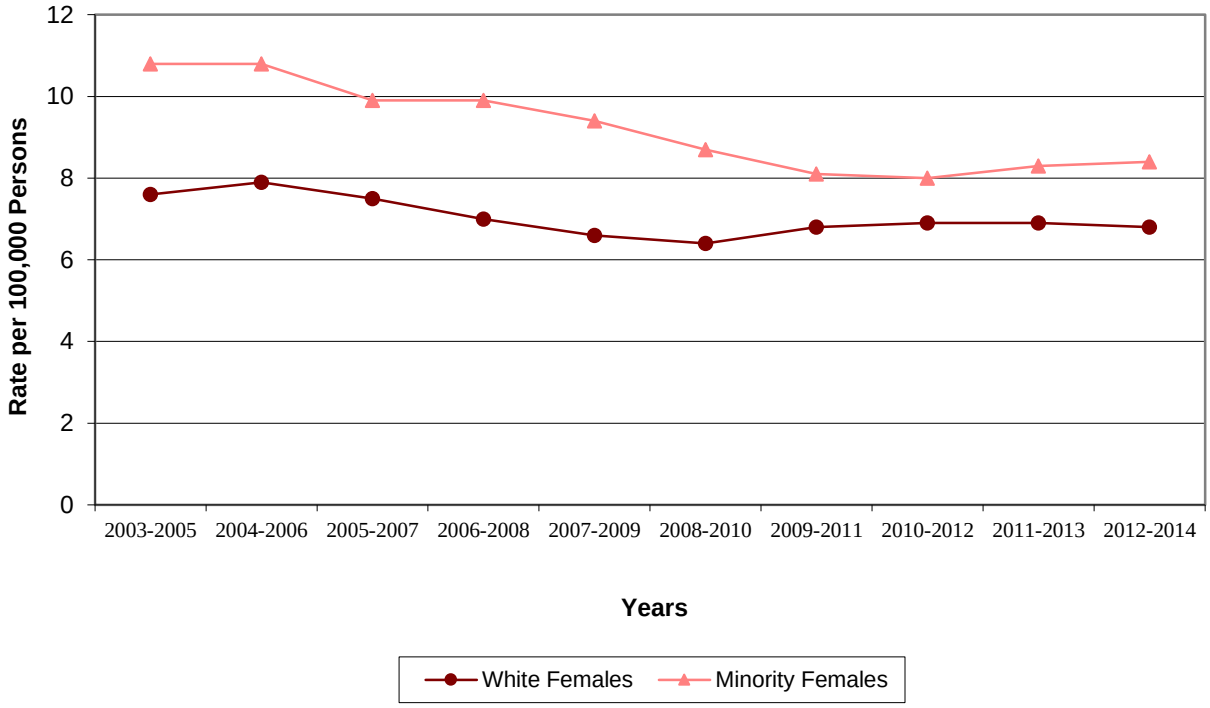


Figure 5b: 2003 – 2014 Cervical Cancer Mortality Trends by Race

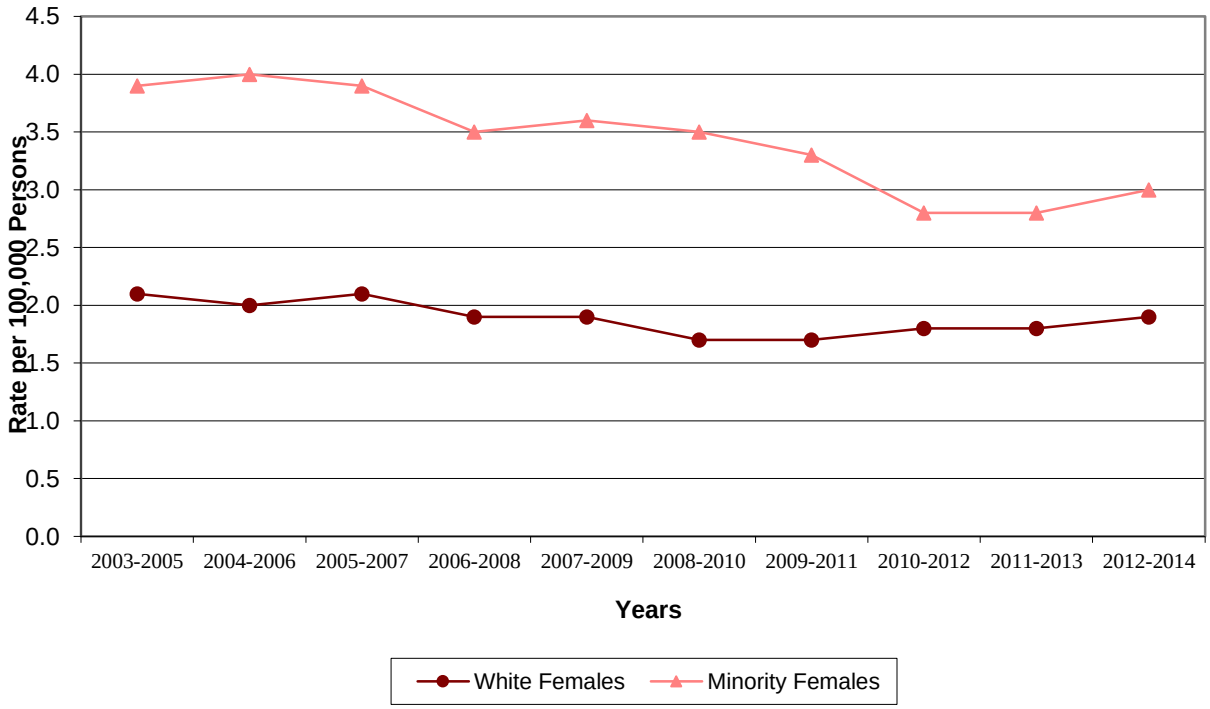


Figure 6: 2003 – 2014 Oral Cavity Cancer Incidence Trends by Gender and Race

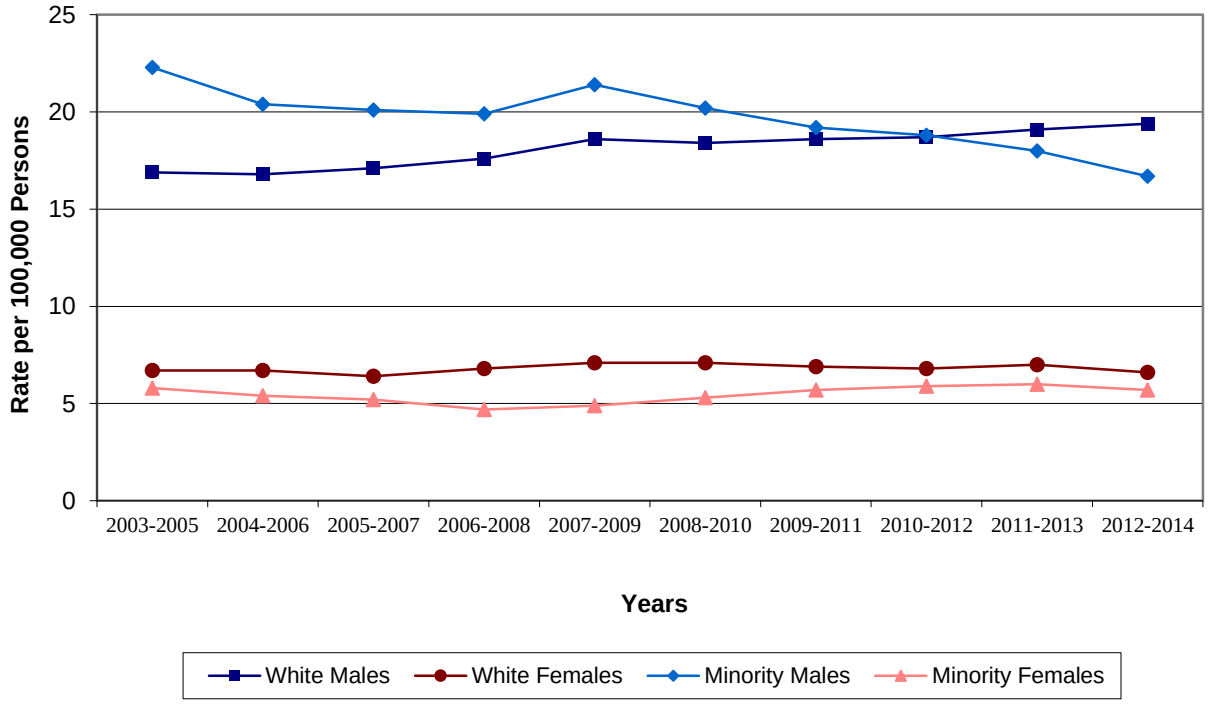


Figure 7: 2003 – 2014 Laryngeal Cancer Incidence Trends by Gender and Race

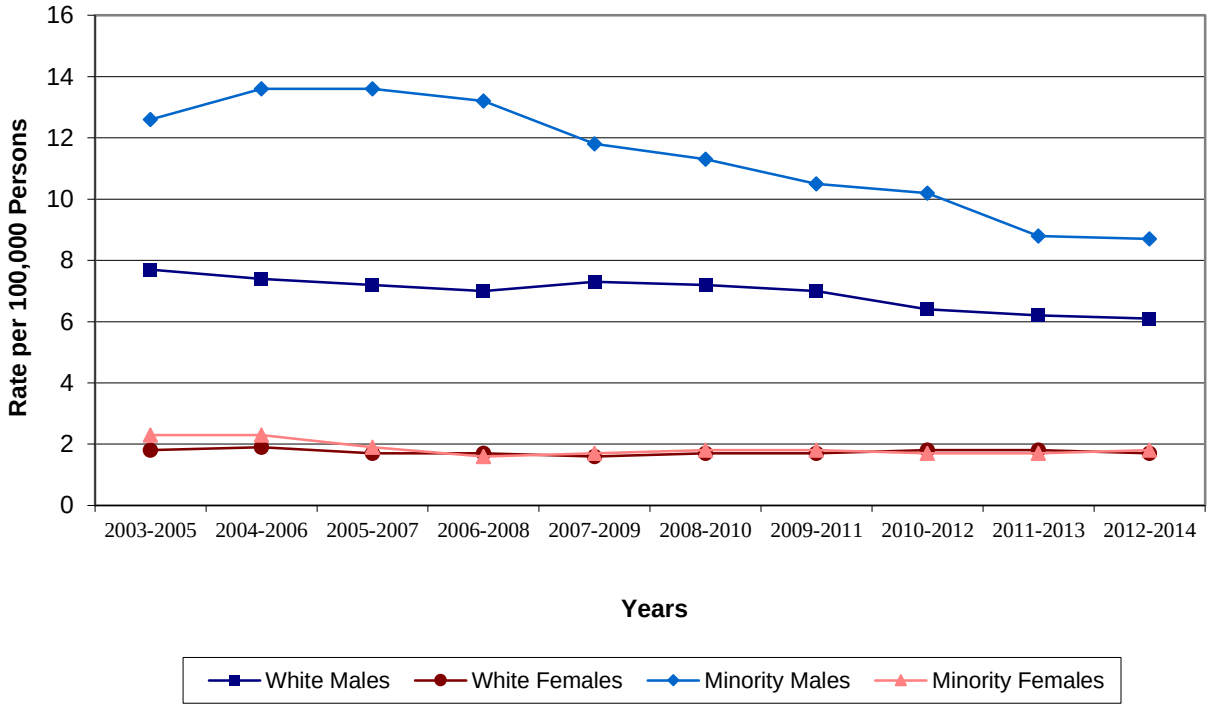


Figure 8: 2003 – 2014 Melanoma Incidence Trends by Gender and Race

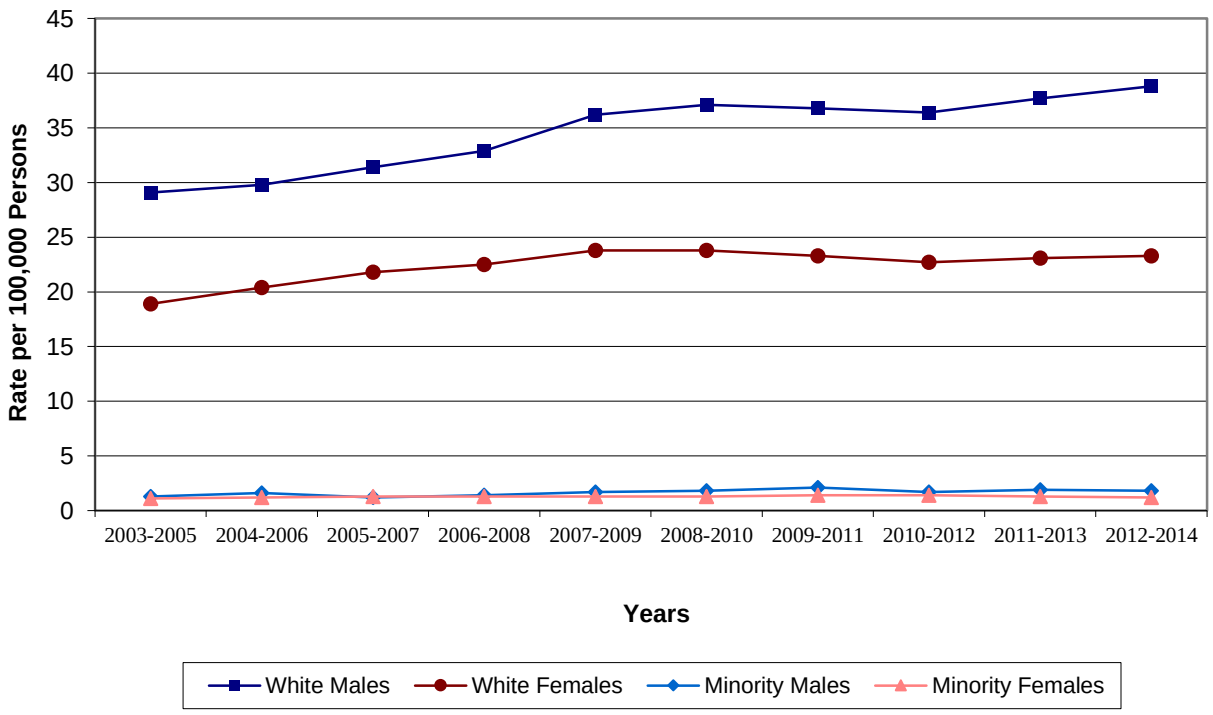


Figure 9: 2003 – 2014 Kidney Cancer Incidence Trends by Gender and Race

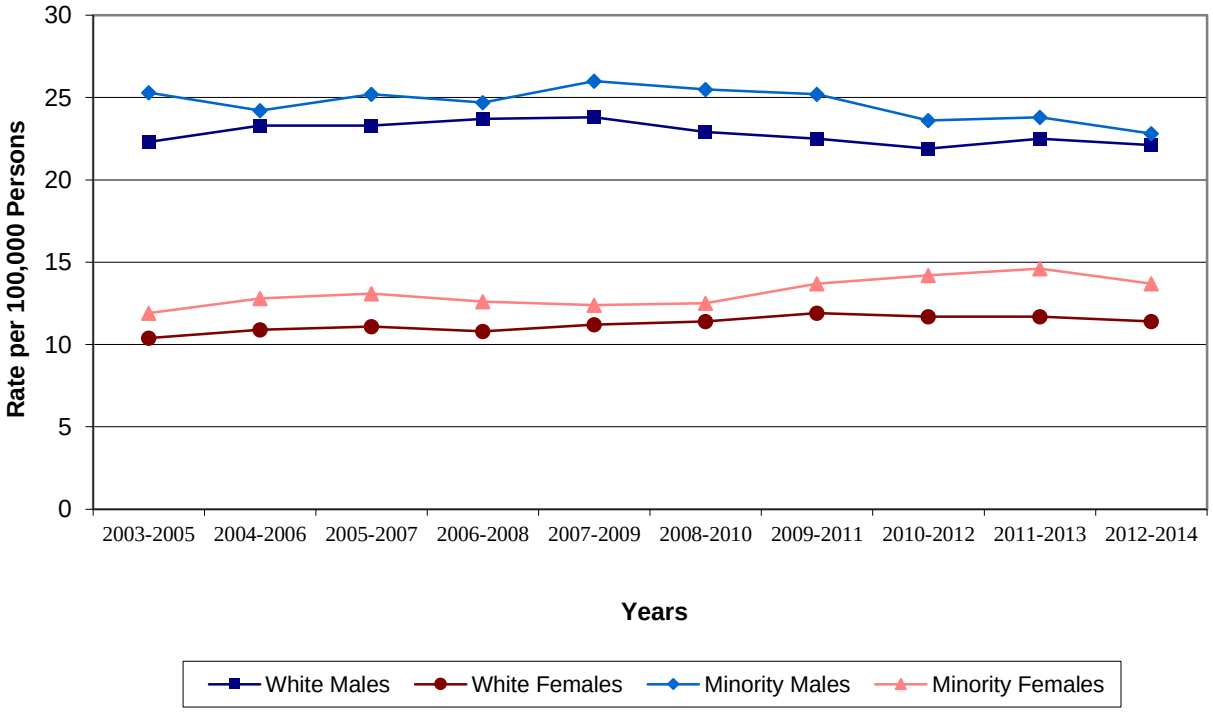


Figure 10: 2003 – 2014 Endocrine Cancer Incidence Trends by Gender and Race

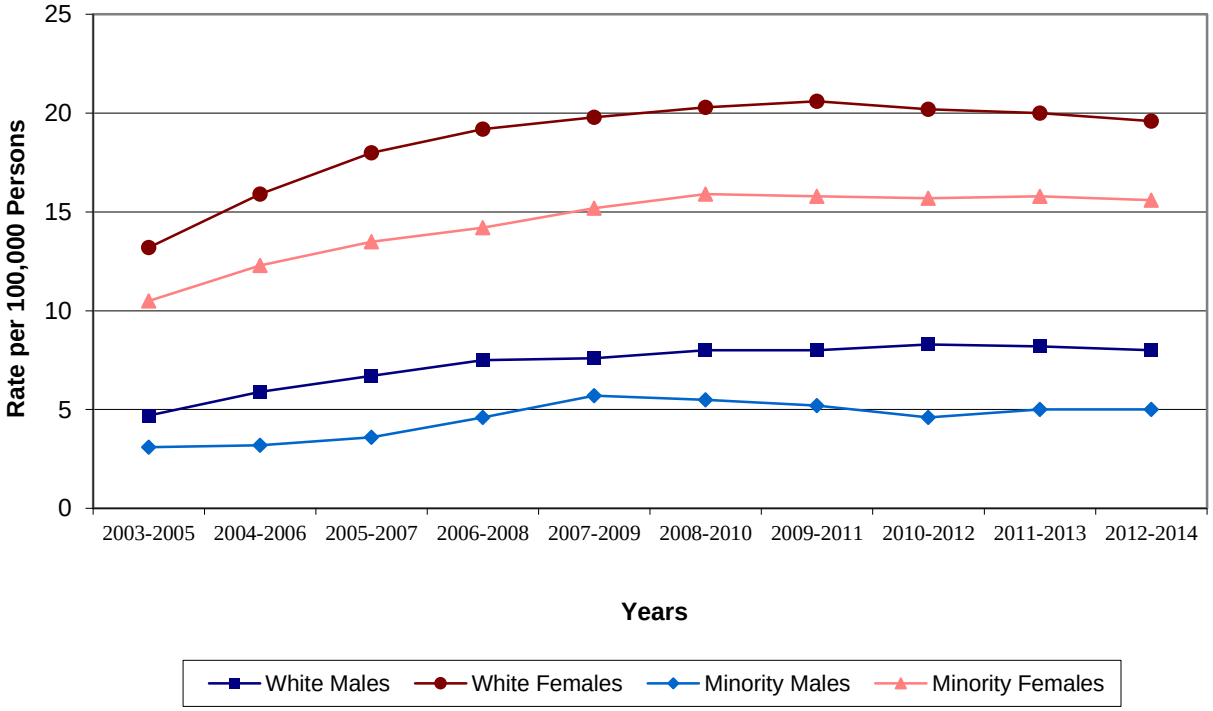


Figure 11: 2003 – 2014 Stomach Cancer Mortality Trends by Gender and Race

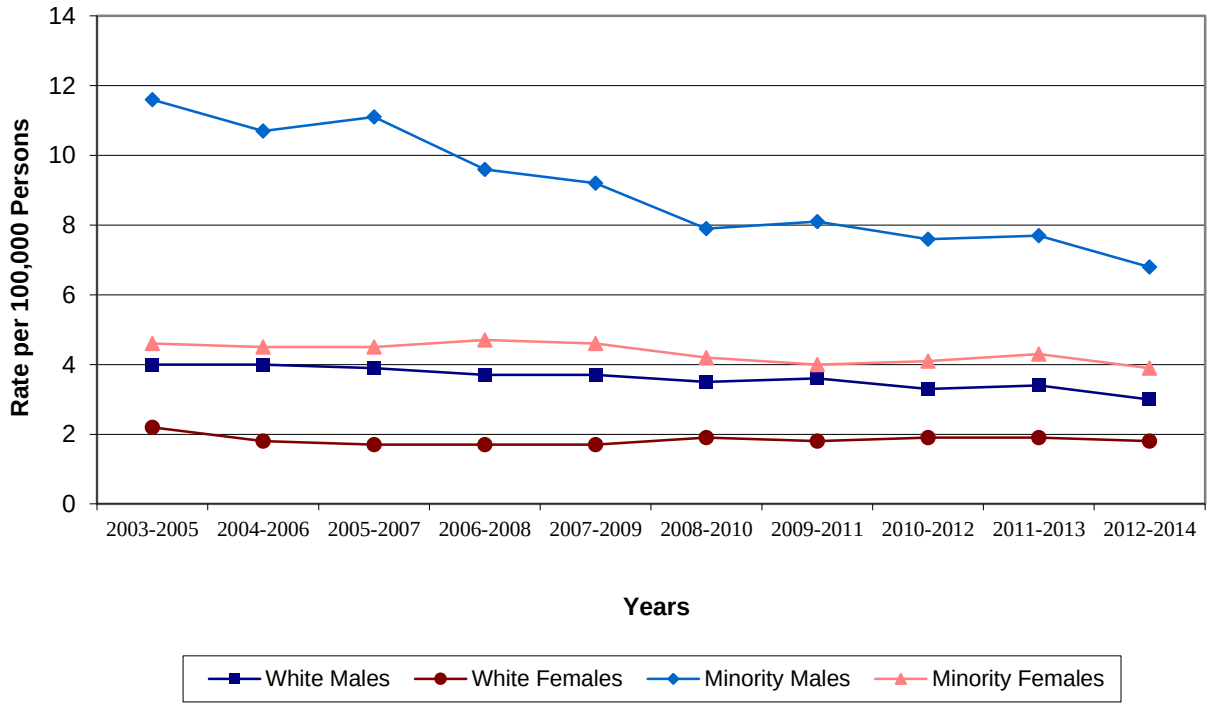


Figure 12: 2003 – 2014 Liver Cancer Mortality Trends by Gender and Race

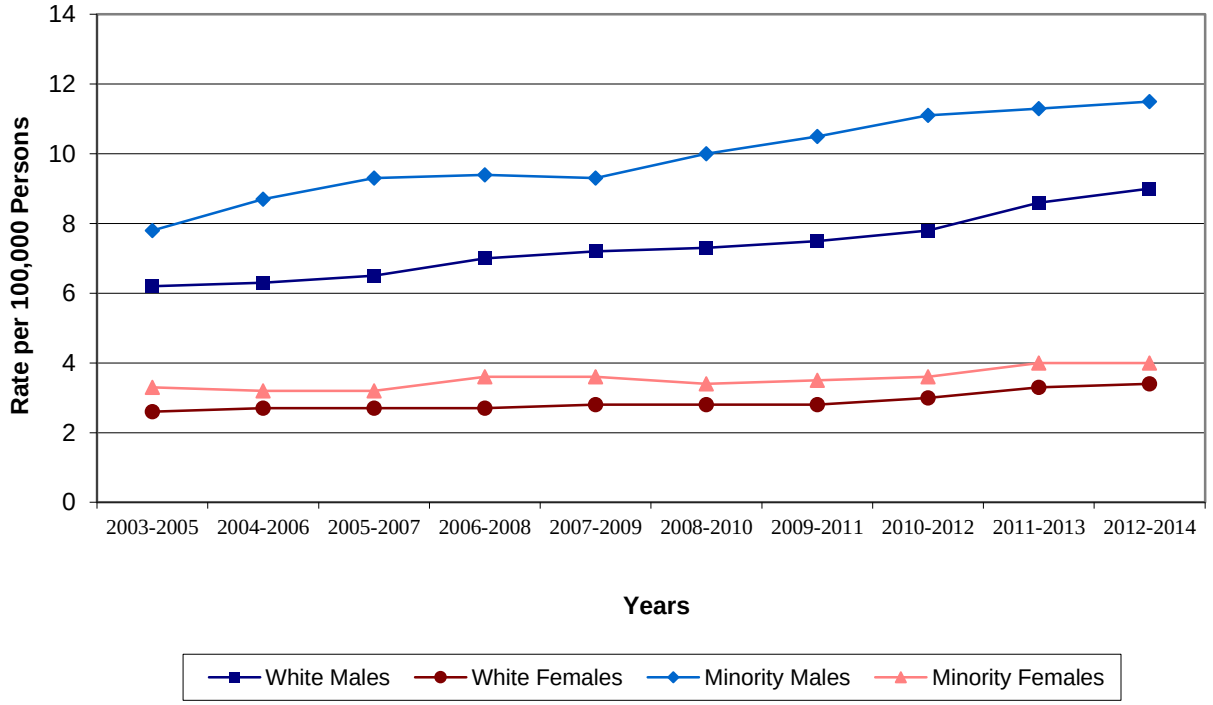


Figure 13: 2003 – 2014 Pancreatic Cancer Mortality Trends by Gender and Race

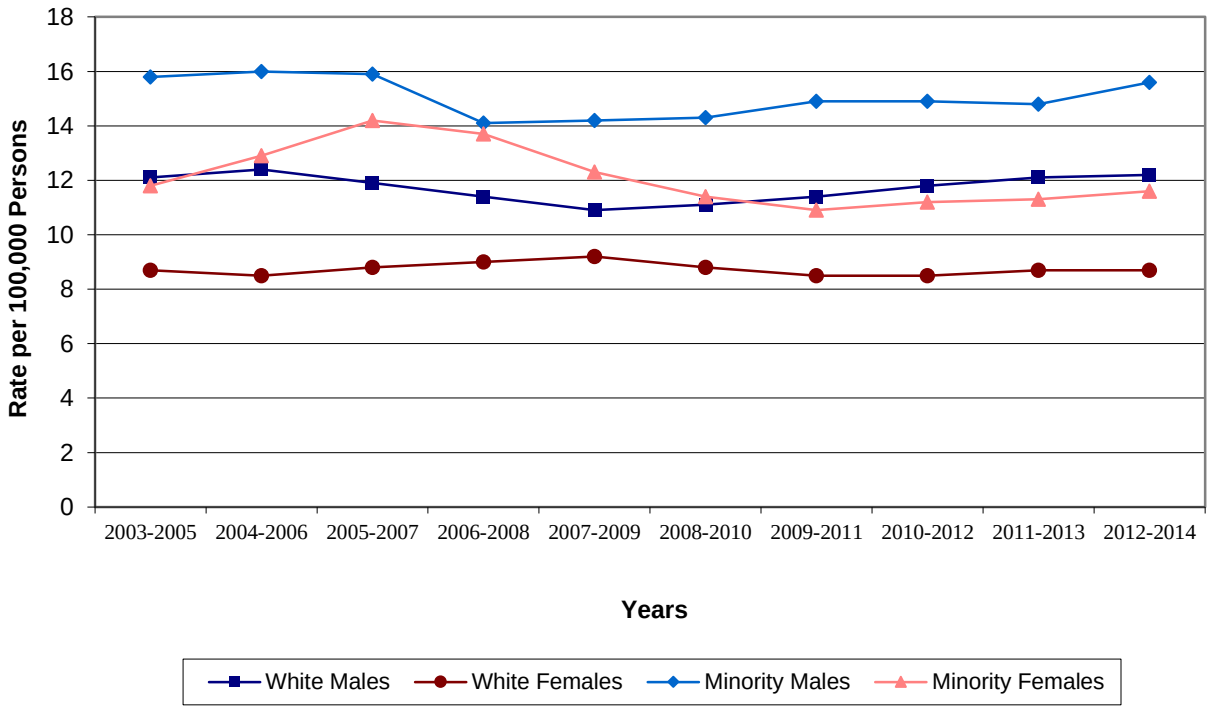
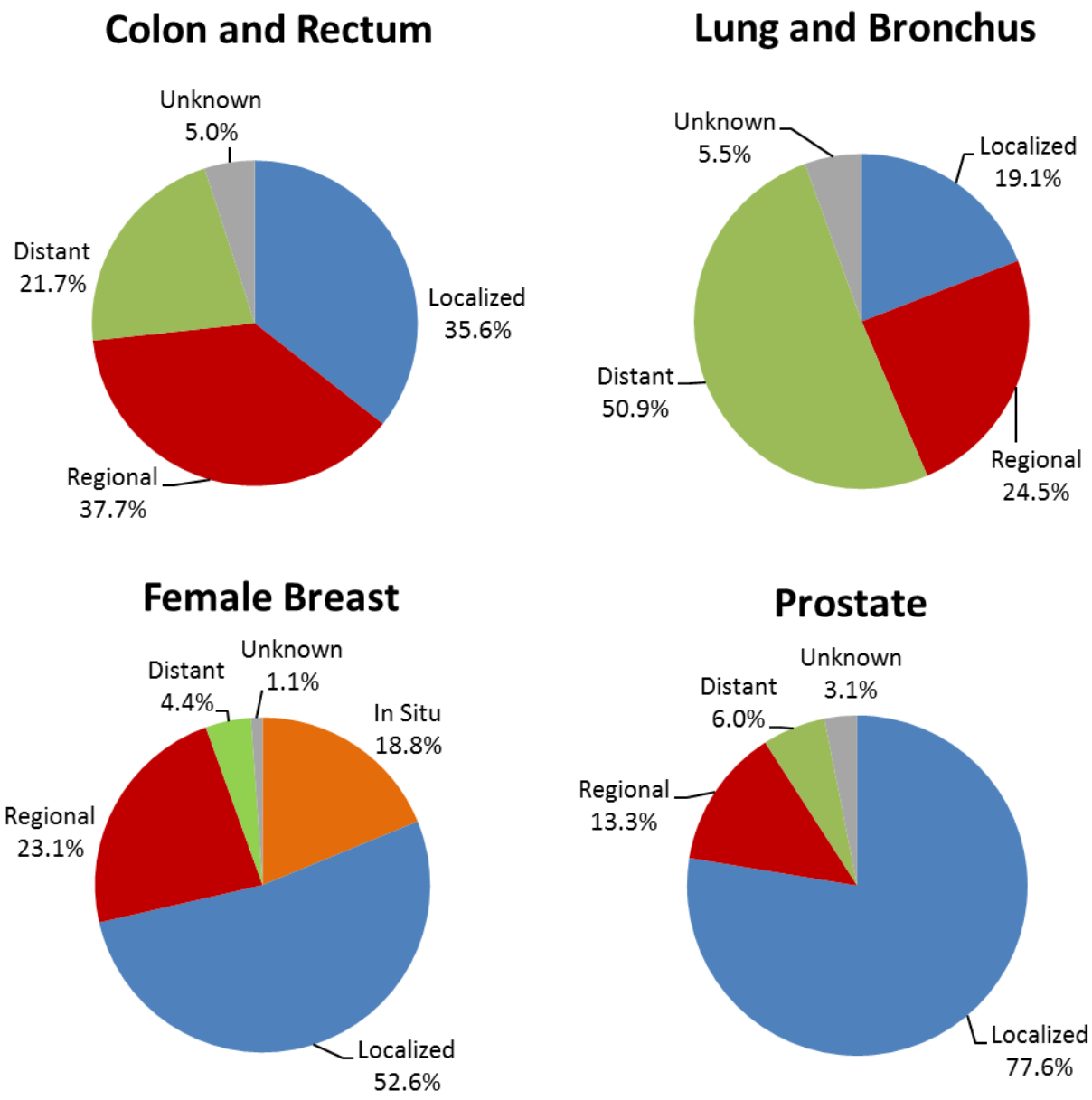


Figure 14: 2014 Percent of Top Four Cancer Cases by Stage



Appendix A: 2014 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
North Carolina	7,201,913	2,273,014	164,989	300,471	9,940,387
Alamance	119,635	31,527	2,292	2,903	156,357
Alexander	34,405	2,372	166	421	37,364
Alleghany	10,465	258	57	98	10,878
Anson	12,674	12,932	214	302	26,122
Ashe	26,521	332	82	166	27,101
Avery	16,712	824	95	95	17,726
Beaufort	34,396	12,353	447	317	47,513
Bertie	7,407	12,731	119	149	20,406
Bladen	21,211	12,147	1,053	131	34,542
Brunswick	102,701	14,001	1,088	1,129	118,919
Buncombe	227,089	17,805	1,479	3,924	250,297
Burke	77,925	6,093	743	4,046	88,807
Cabarrus	150,698	33,926	1,451	5,854	191,929
Caldwell	75,751	4,537	476	670	81,434
Camden	8,585	1,386	54	261	10,286
Carteret	62,538	4,695	446	1,051	68,730
Caswell	14,865	7,868	136	87	22,956
Catawba	132,485	14,598	882	6,653	154,618
Chatham	56,991	9,341	844	1,433	68,609
Cherokee	25,829	560	490	208	27,087
Chowan	9,264	5,070	75	207	14,616
Clay	10,372	170	45	31	10,618
Cleveland	74,604	20,930	336	1,137	97,007
Columbus	36,697	17,745	2,145	351	56,938
Craven	76,801	23,611	794	3,144	104,350
Cumberland	178,165	129,462	6,611	11,576	325,814
Currituck	22,879	1,636	146	266	24,927
Dare	33,339	1,253	205	286	35,083
Davidson	143,927	16,225	1,324	2,591	164,067
Davie	37,790	2,924	240	368	41,322
Duplin	42,283	15,811	859	665	59,618
Durham	159,228	117,247	3,134	15,714	295,323
Edgecombe	22,207	32,015	395	281	54,898
Forsyth	250,342	102,376	3,329	9,546	365,593

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix A (continued): 2014 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Franklin	44,348	17,359	590	508	62,805
Gaston	171,284	35,016	1,277	3,463	211,040
Gates	7,482	3,949	75	44	11,550
Graham	7,851	85	667	48	8,651
Granville	38,221	19,148	500	488	58,357
Greene	12,687	7,929	477	154	21,247
Guilford	304,103	179,501	4,167	25,188	512,959
Halifax	21,757	28,599	2,207	456	53,019
Harnett	93,276	29,003	2,409	2,177	126,865
Haywood	57,775	879	404	322	59,380
Henderson	104,372	4,227	847	1,493	110,939
Hertford	8,982	14,825	347	226	24,380
Hoke	26,728	18,494	5,324	1,098	51,644
Hyde	3,881	1,698	41	41	5,661
Iredell	140,171	21,236	1,028	4,387	166,822
Jackson	35,257	1,093	4,202	446	40,998
Johnston	147,401	29,967	1,745	1,846	180,959
Jones	6,723	3,222	78	51	10,074
Lee	45,363	12,465	900	860	59,588
Lenoir	33,056	24,362	400	581	58,399
Lincoln	74,003	4,901	319	657	79,880
McDowell	42,131	2,023	350	450	44,954
Macon	32,632	725	250	282	33,889
Madison	20,510	442	94	120	21,166
Martin	12,945	10,244	99	160	23,448
Mecklenburg	609,308	333,998	8,811	59,811	1,011,928
Mitchell	14,931	165	132	102	15,330
Montgomery	21,318	5,374	272	446	27,410
Moore	77,980	12,695	1,016	1,375	93,066
Nash	54,207	38,045	926	1,071	94,249
New Hanover	178,300	32,857	1,361	4,067	216,585
Northampton	8,217	12,157	128	65	20,567
Onslow	145,589	32,152	1,985	5,541	185,267
Orange	109,696	18,034	999	11,431	140,160
Pamlico	10,051	2,678	94	86	12,909

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix A (continued): 2014 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Pasquotank	23,578	15,126	222	702	39,628
Pender	45,288	9,763	563	472	56,086
Perquimans	9,967	3,366	56	73	13,462
Person	27,608	10,949	351	217	39,125
Pitt	107,664	62,370	968	4,101	175,103
Polk	19,078	1,021	113	125	20,337
Randolph	129,397	9,639	1,571	2,010	142,617
Richmond	28,878	14,765	1,518	539	45,700
Robeson	44,350	34,055	55,010	1,317	134,732
Rockingham	72,499	18,089	536	697	91,821
Rowan	112,180	23,736	864	1,868	138,648
Rutherford	58,733	7,073	276	455	66,537
Sampson	43,538	17,754	2,120	598	64,010
Scotland	16,823	14,263	4,297	332	35,715
Stanly	51,795	7,171	238	1,425	60,629
Stokes	43,912	2,080	218	205	46,415
Surry	68,660	3,260	422	638	72,980
Swain	9,634	278	4,283	91	14,286
Transylvania	31,126	1,520	133	212	32,991
Tyrrell	2,440	1,542	35	101	4,118
Union	183,717	27,546	1,553	5,521	218,337
Vance	20,932	23,002	356	297	44,587
Wake	701,150	221,173	8,847	68,101	999,271
Warren	8,383	10,600	1,154	87	20,224
Washington	6,121	6,254	124	59	12,558
Watauga	50,389	1,162	203	634	52,388
Wayne	80,209	41,025	1,028	2,240	124,502
Wilkes	64,737	3,385	265	415	68,802
Wilson	46,810	33,022	514	1,048	81,394
Yadkin	35,891	1,458	250	199	37,798
Yancey	17,109	259	128	90	17,586

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix B: 2014 Population Estimates by Age Group and County

	0-19	20-44	45-64	65 and above	Total
North Carolina	2,555,785	3,313,148	2,608,636	1,462,818	9,940,387
Alamance	40,858	48,740	41,583	25,176	156,357
Alexander	8,544	11,150	10,604	7,066	37,364
Alleghany	2,202	2,731	3,281	2,664	10,878
Anson	5,769	8,859	7,209	4,285	26,122
Ashe	5,501	7,234	7,969	6,397	27,101
Avery	3,359	5,835	4,919	3,613	17,726
Beaufort	10,951	12,720	13,593	10,249	47,513
Bertie	4,193	6,197	6,036	3,980	20,406
Bladen	8,226	9,905	9,935	6,476	34,542
Brunswick	22,283	29,364	35,172	32,100	118,919
Buncombe	54,178	82,225	68,608	45,286	250,297
Burke	20,039	26,186	26,162	16,420	88,807
Cabarrus	54,847	63,143	49,881	24,058	191,929
Caldwell	18,916	23,885	24,107	14,526	81,434
Camden	2,692	3,010	3,049	1,535	10,286
Carteret	13,888	18,994	20,869	14,979	68,730
Caswell	4,812	6,539	7,090	4,515	22,956
Catawba	39,233	46,997	43,411	24,977	154,618
Chatham	15,190	17,526	19,685	16,208	68,609
Cherokee	5,334	6,486	8,033	7,234	27,087
Chowan	3,363	3,805	4,188	3,260	14,616
Clay	2,094	2,448	3,084	2,992	10,618
Cleveland	24,275	28,807	27,352	16,573	97,007
Columbus	13,951	17,276	15,620	10,091	56,938
Craven	26,039	36,213	24,223	17,875	104,350
Cumberland	92,921	125,681	71,952	35,260	325,814
Currituck	6,109	7,263	7,866	3,689	24,927
Dare	7,475	9,826	11,222	6,560	35,083
Davidson	40,779	48,557	47,156	27,575	164,067
Davie	9,930	11,067	12,357	7,968	41,322
Duplin	16,248	18,204	15,698	9,468	59,618
Durham	74,300	118,226	70,144	32,653	295,323
Edgecombe	14,003	16,171	15,424	9,300	54,898
Forsyth	97,915	118,684	96,426	52,568	365,593

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix B (continued): 2014 Population Estimates by Age Group and County

	0-19	20-44	45-64	65 and above	Total
Franklin	16,204	18,949	18,124	9,528	62,805
Gaston	53,600	67,357	58,264	31,819	211,040
Gates	2,733	3,090	3,671	2,056	11,550
Graham	2,016	2,299	2,413	1,923	8,651
Granville	13,924	18,081	17,428	8,924	58,357
Greene	4,974	7,231	5,935	3,107	21,247
Guilford	134,084	175,612	132,625	70,638	512,959
Halifax	12,690	15,285	15,343	9,701	53,019
Harnett	38,095	45,559	29,075	14,136	126,865
Haywood	12,027	16,024	17,245	14,084	59,380
Henderson	23,953	29,214	30,630	27,142	110,939
Hertford	5,846	7,345	6,945	4,244	24,380
Hoke	15,963	20,031	11,316	4,334	51,644
Hyde	1,089	1,872	1,694	1,006	5,661
Iredell	43,800	51,648	47,017	24,357	166,822
Jackson	9,559	14,119	10,072	7,248	40,998
Johnston	52,008	58,738	47,985	22,228	180,959
Jones	2,104	2,739	3,047	2,184	10,074
Lee	16,468	18,852	15,335	8,933	59,588
Lenoir	14,683	16,664	16,605	10,447	58,399
Lincoln	19,280	23,881	24,019	12,700	79,880
McDowell	10,243	13,354	13,035	8,322	44,954
Macon	7,084	8,337	9,536	8,932	33,889
Madison	4,866	6,124	5,995	4,181	21,166
Martin	5,314	6,199	7,092	4,843	23,448
Mecklenburg	274,110	391,306	244,961	101,551	1,011,928
Mitchell	3,151	4,054	4,533	3,592	15,330
Montgomery	6,954	7,868	7,524	5,064	27,410
Moore	21,485	25,317	24,065	22,199	93,066
Nash	23,849	28,177	26,775	15,448	94,249
New Hanover	48,953	78,501	54,845	34,286	216,585
Northampton	4,272	5,277	6,309	4,709	20,567
Onslow	54,197	85,645	29,660	15,765	185,267
Orange	36,808	51,955	35,669	15,728	140,160
Pamlico	2,353	3,231	3,961	3,364	12,909

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix B (continued): 2014 Population Estimates by Age Group and County

	0-19	20-44	45-64	65 and above	Total
Pasquotank	9,890	13,246	10,344	6,148	39,628
Pender	13,669	16,616	16,205	9,596	56,086
Perquimans	2,967	3,365	3,848	3,282	13,462
Person	9,379	11,315	11,601	6,830	39,125
Pitt	46,776	69,263	39,190	19,874	175,103
Polk	3,928	4,536	6,284	5,589	20,337
Randolph	36,686	42,934	40,073	22,924	142,617
Richmond	11,862	14,307	12,208	7,323	45,700
Robeson	39,318	44,031	33,822	17,561	134,732
Rockingham	21,260	26,016	27,719	16,826	91,821
Rowan	34,904	42,897	38,195	22,652	138,648
Rutherford	15,577	18,626	19,328	13,006	66,537
Sampson	17,323	19,429	16,987	10,271	64,010
Scotland	9,358	11,110	9,520	5,727	35,715
Stanly	14,667	18,402	16,899	10,661	60,629
Stokes	10,324	12,908	14,308	8,875	46,415
Surry	17,747	20,822	20,537	13,874	72,980
Swain	3,582	4,293	3,764	2,647	14,286
Transylvania	6,252	8,160	9,170	9,409	32,991
Tyrrell	815	1,363	1,144	796	4,118
Union	68,722	66,476	58,410	24,729	218,337
Vance	11,831	13,279	12,160	7,317	44,587
Wake	277,860	369,002	252,305	100,104	999,271
Warren	4,223	5,539	6,109	4,353	20,224
Washington	2,963	3,191	3,761	2,643	12,558
Watauga	11,609	21,635	11,665	7,479	52,388
Wayne	33,120	41,186	32,170	18,026	124,502
Wilkes	16,002	19,225	19,920	13,655	68,802
Wilson	21,184	24,699	22,220	13,291	81,394
Yadkin	9,109	10,731	11,032	6,926	37,798
Yancey	3,722	4,657	5,082	4,125	17,586

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix C: 2014 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
North Carolina	3,547,774	3,654,139	1,294,787	1,443,687	9,940,387
Alamance	57,639	61,996	17,011	19,711	156,357
Alexander	17,264	17,141	1,764	1,195	37,364
Alleghany	5,199	5,266	236	177	10,878
Anson	6,644	6,030	7,081	6,367	26,122
Ashe	13,149	13,372	306	274	27,101
Avery	8,848	7,864	814	200	17,726
Beaufort	16,815	17,581	6,036	7,081	47,513
Bertie	3,769	3,638	6,614	6,385	20,406
Bladen	10,503	10,708	6,092	7,239	34,542
Brunswick	49,881	52,820	7,847	8,371	118,919
Buncombe	108,952	118,137	11,300	11,908	250,297
Burke	38,259	39,666	5,778	5,104	88,807
Cabarrus	74,184	76,514	19,398	21,833	191,929
Caldwell	37,383	38,368	2,857	2,826	81,434
Camden	4,292	4,293	840	861	10,286
Carteret	30,690	31,848	3,168	3,024	68,730
Caswell	7,535	7,330	4,080	4,011	22,956
Catawba	64,920	67,565	10,950	11,183	154,618
Chatham	27,447	29,544	5,389	6,229	68,609
Cherokee	12,536	13,293	626	632	27,087
Chowan	4,517	4,747	2,456	2,896	14,616
Clay	5,100	5,272	135	111	10,618
Cleveland	36,269	38,335	10,450	11,953	97,007
Columbus	17,922	18,775	10,155	10,086	56,938
Craven	39,509	37,292	13,403	14,146	104,350
Cumberland	90,418	87,747	69,002	78,647	325,814
Currituck	11,391	11,488	975	1,073	24,927
Dare	16,471	16,868	858	886	35,083
Davidson	70,841	73,086	9,589	10,551	164,067
Davie	18,572	19,218	1,659	1,873	41,322
Duplin	21,211	21,072	8,024	9,311	59,618
Durham	78,326	80,902	63,197	72,898	295,323
Edgecombe	10,640	11,567	14,803	17,888	54,898
Forsyth	120,738	129,604	52,909	62,342	365,593

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix C (continued): 2014 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Franklin	22,291	22,057	8,887	9,570	62,805
Gaston	83,659	87,625	18,673	21,083	211,040
Gates	3,714	3,768	1,929	2,139	11,550
Graham	3,872	3,979	402	398	8,651
Granville	19,463	18,758	10,287	9,849	58,357
Greene	6,859	5,828	4,732	3,828	21,247
Guilford	147,118	156,985	96,525	112,331	512,959
Halifax	10,550	11,207	14,800	16,462	53,019
Harnett	46,418	46,858	16,427	17,162	126,865
Haywood	27,785	29,990	800	805	59,380
Henderson	50,369	54,003	3,211	3,356	110,939
Hertford	4,652	4,330	7,412	7,986	24,380
Hoke	13,525	13,203	11,956	12,960	51,644
Hyde	2,071	1,810	1,090	690	5,661
Iredell	69,526	70,645	12,685	13,966	166,822
Jackson	17,293	17,964	2,892	2,849	40,998
Johnston	72,632	74,769	16,015	17,543	180,959
Jones	3,353	3,370	1,554	1,797	10,074
Lee	22,391	22,972	6,848	7,377	59,588
Lenoir	16,208	16,848	11,676	13,667	58,399
Lincoln	36,886	37,117	2,977	2,900	79,880
McDowell	20,988	21,143	1,596	1,227	44,954
Macon	15,801	16,831	702	555	33,889
Madison	10,135	10,375	382	274	21,166
Martin	6,231	6,714	4,790	5,713	23,448
Mecklenburg	300,124	309,184	186,658	215,962	1,011,928
Mitchell	7,365	7,566	204	195	15,330
Montgomery	10,485	10,833	2,828	3,264	27,410
Moore	37,737	40,243	6,921	8,165	93,066
Nash	26,670	27,537	18,690	21,352	94,249
New Hanover	86,173	92,127	17,909	20,376	216,585
Northampton	4,112	4,105	5,868	6,482	20,567
Onslow	79,859	65,730	20,585	19,093	185,267
Orange	52,688	57,008	14,362	16,102	140,160
Pamlico	5,069	4,982	1,563	1,295	12,909

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Appendix C (continued): 2014 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Pasquotank	11,751	11,827	7,732	8,318	39,628
Pender	22,863	22,425	5,226	5,572	56,086
Perquimans	4,865	5,102	1,614	1,881	13,462
Person	13,533	14,075	5,506	6,011	39,125
Pitt	52,016	55,648	30,615	36,824	175,103
Polk	9,128	9,950	605	654	20,337
Randolph	63,916	65,481	6,565	6,655	142,617
Richmond	14,221	14,657	8,165	8,657	45,700
Robeson	21,831	22,519	43,214	47,168	134,732
Rockingham	35,274	37,225	9,097	10,225	91,821
Rowan	55,570	56,610	12,906	13,562	138,648
Rutherford	28,416	30,317	3,748	4,056	66,537
Sampson	21,737	21,801	9,806	10,666	64,010
Scotland	8,270	8,553	9,432	9,460	35,715
Stanly	25,742	26,053	4,481	4,353	60,629
Stokes	21,513	22,399	1,297	1,206	46,415
Surry	33,527	35,133	2,152	2,168	72,980
Swain	4,673	4,961	2,243	2,409	14,286
Transylvania	14,955	16,171	1,011	854	32,991
Tyrrell	1,224	1,216	993	685	4,118
Union	91,142	92,575	16,764	17,856	218,337
Vance	10,119	10,813	10,761	12,894	44,587
Wake	345,867	355,283	140,325	157,796	999,271
Warren	4,329	4,054	5,880	5,961	20,224
Washington	2,972	3,149	2,919	3,518	12,558
Watauga	25,165	25,224	1,075	924	52,388
Wayne	40,453	39,756	20,785	23,508	124,502
Wilkes	31,827	32,910	2,126	1,939	68,802
Wilson	22,803	24,007	15,872	18,712	81,394
Yadkin	17,753	18,138	969	938	37,798
Yancey	8,413	8,696	265	212	17,586

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015.

Bibliography

1. American Cancer Society: What is cancer? Available at www.cancer.org/Cancer/CancerBasics/what-is-cancer. Accessed Jan. 04, 2017.
2. Akin D, Avery M, Daye R, Enright D, Farmer AH. *North Carolina Vital Statistics 2014, Volume 2: Leading Causes of Death*, October 2015. Available at www.schs.state.nc.us/data/vital/lcd/2014/pdf/Vol2_2014_PRT.pdf. Accessed Jan. 04, 2017.
3. North Carolina General Assembly - General Statutes - Chapter 130A: Public Health. Available at www.ncleg.net/gascripts/Statutes/StatutesTOC.pl?Chapter=0130A. Accessed Jan. 04, 2017.
4. North American Association of Central Cancer Registries. Available at www.naaccr.org. Accessed Jan. 04, 2017.
5. Centers for Disease Control and Prevention – Cancer - National Program of Cancer Registries. Available at www.cdc.gov/cancer/npcr. Accessed Jan. 04, 2017.
6. North Carolina Administrative Code - Health and Human Services - Information Services - Laboratory Sections - Cancer Registries. Available at http://reports.oah.state.nc.us/ncac/title%2010a%20-%20health%20and%20human%20services/chapter%2047%20-%20information%20services/subchapter%20b/subchapter%20b%20rules.html. Accessed Jan. 04, 2017.
7. Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin DM, Whelan S (eds). *International Classification of Diseases for Oncology*, 3rd ed. Geneva: World Health Organization; 2000.
8. National Cancer Institute – Surveillance, Epidemiology and End Results. Available at http://seer.cancer.gov. Accessed Jan. 04, 2017.
9. North American Association of Central Cancer Registries Race and Ethnicity Work Group. *NAACCR Guideline for Enhancing Hispanic/Latino Identification: Revised NAACCR Hispanic/Latino Identification Algorithm [NHIA v2.2]*. Springfield (IL): North American Association of Central Cancer Registries. August 2010.
10. Buescher PA. Problems with rates based on small numbers. *Statistical Primer,* No. 12, State Center for Health Statistics, April 1997, Revised August 2008. Available at www.schs.state.nc.us/SCHS/pdf/primer12_2.pdf. Accessed Jan. 04, 2017.
11. Center for Disease Control and Prevention – National Center for Health Statistics – National Vital Statistics Program - Bridged-Race Population Estimates – Vintage 2015. Available at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2015. Accessed Jan. 04, 2017.